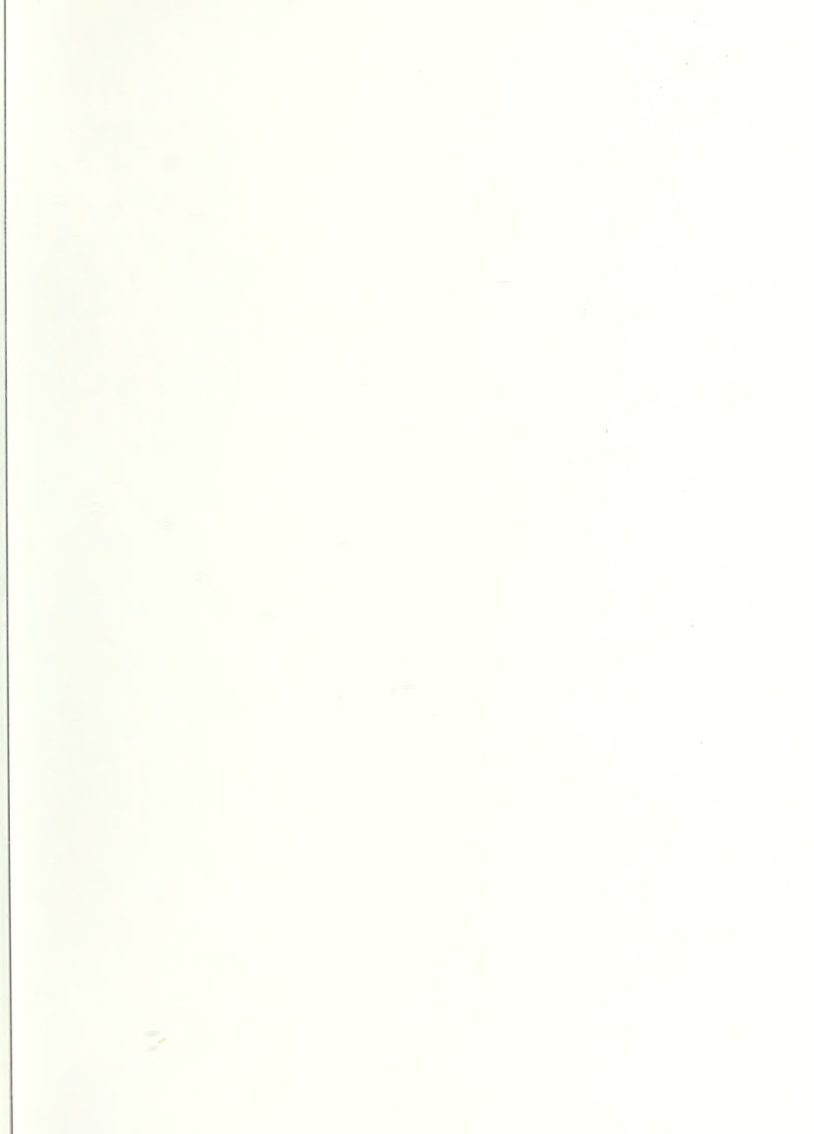




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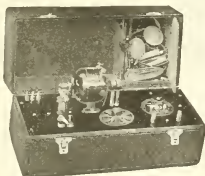
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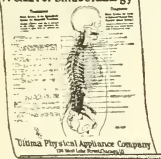
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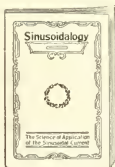
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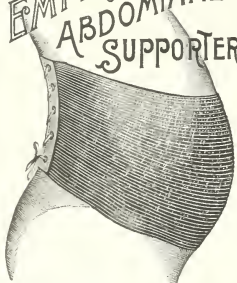
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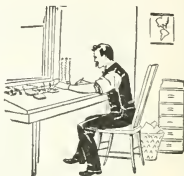


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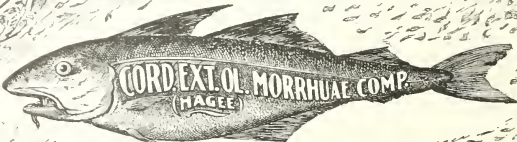
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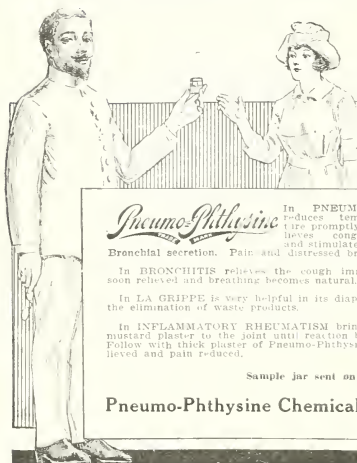
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The Rehabilitation of Drug Treatment

IT is an interesting fact that the distrust in the ability of drugs to modify the course of disease, which has been paraded so blatantly for almost half a century, arose in the very stronghold of authoritative scientific medicine, and that it was upheld and sustained by the leaders of the dominant school, who in this manner expressed their disapproval of the cumbersome and uncritical polypharmacy that had come down through the centuries from Galen. It is these that were the foremost disciples and prophets of modern medical science and who are responsible for the attempts to demonstrate everything *ad oculos*, to leave nothing to chance and to take nothing for granted.

Since the days of Haller, the observation of vital processes in the animal body had assumed an important position, and the attempt was made to justify the introduction of foreign agents into the organism, by observing every influence and effect upon its vital processes, more particularly upon the heart and circulation, upon the respiration

and the nervous system. Not being able to discover adequate results following in animal-studies upon the administration of various drugs and despairing of establishing a reasonable method for administering many of these agents, without any measure of certainty as to their action, the leaders in medicine, notably those of the younger Viennese school, announced emphatically that drug-treatment is of no value. Strangely enough, this astonishing self-betrayal of ignorance and of inability to observe has been able to maintain itself until the most recent times, even despite the fact that many of the foremost clinicians constantly were asserting their "faith in the efficacy of the right drug given in the right dose, at the right time, to the right patient." (Solomon Solis Cohen.)

In contrast to this pessimistic attitude—which denies the efficacy of proper drug-treatment, which asserts that only "expectant" treatment is honest (although it is hard to understand why the physician should receive credit or be paid for "ex-

pecting"), and which has gone so far as to declare that all diseases ultimately will become surgical and that nothing definite can be done until that stage has been entered upon—there is manifest a refreshing optimism and confidence in the ability of the physician to modify the disease-processes by means of proper drug-treatment, to shorten their course, and to assure their happy termination in restored health.

And this cheerful faith in drugs by no means is peculiar only to members of the so-called irregular schools of practice, such as the Homeopaths and Eclectics, but, it is entertained also by many medical men who were trained according to the tenets of the old, or "regular" school. However, it is worthy of note that most of these believers in drugs early have been weaned and removed from the skeptical influence of ultrascientific research, and have been obliged to carry out their practical studies and observations upon human subjects, that is, their patients. As a consequence, their faith in the possibilities of active drug-therapy does not rest upon the outcome of arbitrary animal-experiments, but, it is firmly based upon their own close observation of the human organism, and of the drugs that are administered when this organism is diseased.

While at times isolated influential voices were raised in condemnation of therapeutic nihilism, it is a pleasing fact, one that is certain to result in great benefit to physicians and patients alike, that more recently the pendulum shows rather more than an inclination to return from its extreme negative position, and that the conviction is manifesting itself rather more frequently that proper drug-treatment is an important means of the physician in the accomplishment of his work—the restoration of diseased persons to health. In addition to those, comparatively few, drugs the definite action of which upon the vital functions readily can be demonstrated in experimental animals, a not inconsiderable number of other remedial agents is being restored to favor. This renewed employment, to be sure, is more or less tentative, since it has been realized that the results of any animal-experiments can not serve as a criterion, in themselves, of conditions obtaining in the human body, and, furthermore, that the action of any given drug very often differs markedly in health and

disease. (See, for instance, George F. Butler, *CLINICAL MEDICINE*, 1908, p. 1043, and Sollman's "Pharmacology," 1906, p. 125.)

It is only just to acknowledge that this rehabilitation of drugs is due, at least in part, to the homeopathic and eclectic schools of medicine, because it is their disciples that are particularly keen and exact in their study of drug action, both upon the healthy and the diseased human body, and because these practitioners regard it of primary importance equivalent to a law, to administer drugs for definite indications and to eschew the objectionable polypharmacy of the galenists. Surely, it is a significant sign of better things to come when, in manifestation of his confidence in definite therapeutics, we have a clinician as Abraham Jacobi to assert that he believes in medicines of every kind ("Collectanea," vol. IV, 1909, p. 26), provided their action is understood and they be given in proper cases and dosage; or when we can read editorial expression of opinions like the one in *The Vermont Medical Monthly* for November, 1912, saying that "drugs, by themselves, have restored to usefulness and saved the lives of more people than all other curative attempts combined," and "one need not be a crank on drugs to appreciate this."

The reaction against the prevailing authoritative drug-nihilism is so strong that the conviction is expressed, even in medical journals approved in the publications of our national medical association, that there is no man in all this wide world who knows enough about drugs to sentence them to oblivion, as many of the misinformed laity and some pessimists in the profession fain would do. The unjust and untenable attitude that presumes to decry drug-treatment at all hazards as futile is justly characterized by a writer in *The Journal of the Kansas Medical Society*, who said: "Either to commend or to condemn a therapeutic measure without having personal knowledge and experience with the drug is unscientific and not in accord with the tenets of progressive American medicine."

Moreover, the propriety of investigating the action of drugs and of their remedial measures at the bedside and in the clinic, that is to say, upon the diseased human subject, is supported and established by the opinion to which Francine recently gave expression, namely, that "a clinical experi-

ment is just as scientific in principle as a good piece of laboratory-work, and the best type of clinical teaching is just as scientific as is the same type of laboratory-teaching." It is very true that scientific investigation is necessary for the purpose of explaining clinical observations; yet, such an exact scientist and accomplished surgeon as the late Professor Czerny declared that this scientific investigation can be productive only then when it proceeds from good clinical observation.

"Drugs are a science; in fact, one of the oldest. We must study them as warriors study their weapons. They are our weapons against disease when disease has already occurred. It is a science which must be the peculiar property of physicians, for, only they who know can judge. We have much to learn and probably shall never cease learning . . ." (Editorial in *The Vermont Medical Monthly* for November, 1912.)

One of the foremost prerequisites for the successful study of remedies is, that we should have at our command drugs that not only are reliable in point of preparation, but, also, definite in their composition and in chemical characteristics. It is for this reason that a few alkaloids and other active principles have been able to hold out against destructive negativism, while the recent revival of positive drug-therapy is, in a large measure attributable to the discovery and preparation of a large number of active principles from vegetable drugs that in their crude form, for centuries had proved their potency and their ability to influence the human body either for good or for ill. With the demonstration of the properties of the active principles in which the therapeutic virtues of these plants and other crude drugs reside, and also with the principle that we owe to Hahnemann, of giving small doses of definite drugs frequently repeated, the direct treatment of diseased persons has become more hopeful and more successful.

The credit for this trend belongs, in no small degree, to Doctor Adolph Burggraeve, of Ghent, who originated the newer dosimetric method of treatment; which is not, and never has been, intended to be practiced as the exclusive principle of a new school, but, which was deliberately based upon the teachings of the old ga-

lenic school. Burggraeve and his disciples taught a lesson predestined to work a wholesome and fruitful revolution in medicine, for the purpose of restoring the members of the old school of practice to active and conscious as well as confident usefulness to their patients.

Resolve is, what makes man manliest. Not puny resolve, not crude determination, not errant purposes; but, that strong and indefatigable will that treads down difficulties and danger, as a boy treads down the heaving frost-lands of winter,—which kindles his eye and brain, with a proud pulse beat toward the unattainable. Will makes men giants. It made Napoleon an emperor of kings, Bacon an fathomers of nature, Byron a tutor of passion, and the martyrs masters of death. —Ik. Marvel.

THE MODERN SCHOOL

The third "occasional paper" issued by the General Education Board, 61 Broadway, New York City, is entitled "A Modern School." It is by Abraham Flexner. It can be had by application to the Board, free of charge. It is worth the slight trouble of sending for, not because Flexner prepared it, but, because the arraignment of the present school curriculum, he makes, is just and timely.

The object of education is, the preparation of the child for the duties of mature life. In so far as this is attained, the education fulfills its object. Let each reader look back over his own education and ask himself in how much this has been fulfilled. We, the writer of these lines, take our own case merely as an example: Granted that every bit of information a man gathers is of value and may come in handy at some period, besides affording a satisfaction that counts as much, yet, in how far has this education been of real service in advancing him in life, in enabling him to accomplish the duties of whatever position he may have been called upon to fill?

We, personally, had an exceptional drill in mental arithmetic, and this has been of constant, almost daily value to us through all our life. The ability mentally and accurately to solve problems in less time than others require with pencil and paper is a real help. Of the entire subsequent mathematical course—algebra, geometry, trigonometry, and so on, through to analytical geometry if there ever has been any actual return, we can not now recall it.

The smattering of the natural sciences and physics we acquired has served only

to point the way to future studies in those lines and to exasperate us with the futility of what was taught in school. The value of the classics may be judged by the completeness with which they have vanished from memory. Had they been of any practical value, this could not have been so. Nineteen-twentieths of the entire college curriculum has been of no apparent value, whatever. Of the lore acquired during those four years, the one thing that has proved of most real importance in advancing the subsequent interests has been the fact that we emerged from the halls of learning an accomplished card-player!

To the child, school is a jail, where he is confined by force and compelled to learn a lot of things in which he has no interest and which are not and never will be of any use to him. He is restrained from the plays in which he gets very much more real information, and in that free intercourse with his fellows which affords a discipline far more valuable than that of his teachers. He emerges at last with a mass of useless matter cluttering up his memory-cells and with a contempt for most of the really useful avocations of men. Thanks to our system, the learned professions are overcrowded, while the whole community has been taught to set an inordinate value on "clean" employments and to disdain manual labor and those engaged in it.

Even in the polite education afforded, very much time is wasted in the perpetuation of obsolete and useless relics of former times. Begin with the alphabet: Why should we perpetuate the useless "C" and the innumerable silent letters; and the exceptions and variations from the one good role of using letters as expressive of sounds? Why spell bound, round, pound, hound, found, ground, all pronounced alike, and then follow with wound, pronounced differently, merely because William Pitt brought his provincial tongue into vogue in that one word only? Why spell bight, fight, right, light, tight, and then add "height," because some oldtimer misspelled the word with the interpolated "e"? Why should it be grammatical to obey an exception and say, "It is I," when 99 percent of the people follow the rule and say "It's me"? The years expended uselessly in learning the faults of our spell-

ing and grammar are evidences of our crudeness and lack of consideration.

The "discipline" of which we prate might begin with ourselves, in arranging the school curriculum to meet real needs. How well were it if this wasted time were given to developing the physique of the children and teaching them why and how we do this. Or, in teaching them the use of tools.

When the child goes to the kindergarten he shows a profound interest in it. He is ready before the time to start; he is absorbed in his work and is full of it when he returns home. Why? Because the system pursued there is natural and harmonizes with his inclinations. It is play systematized. But, what is play? Evolution explains this: the child follows the path by which man has emerged from the tree-climbing ape stage. The boy builds nests in the treetops; he rivals the ape in climbing; later, he digs caves; he makes himself a club, a spear with point sharpened in the fire, a bow, a sling. He traps rabbits and snares birds, catches fish, and he acquires every bit of wood-lore with an avidity that he is far from showing toward declensions and paradigms. In his games with his fellows, he learns the all-important lessons of "licking" those he is able to master and keeping out of reach of those who can master him; of detecting the true from the false, of recognizing the yellow streak in one, the sturdiness, the trickiness, the dulness, the dishonesty, the good and the bad, as so intimately commingled in humanity. The knowledge that John Jones is a liar, Bill Smith a thief, Tom Brown a coward, Sam Howard true-blue may in after years be worth more to the boy than the fact that in the days of Julius Cæsar "all Gaul was quartered into three halves."

Discipline? Trust the boys themselves to detect and uproot any little eccentricities in each other. Dirty Jack, Noisy Pete, Snotty Gibbs, Sneaky Tim are informed so often of their small faults that they are shamed into reform.

All girls' games are mere practice in the arts of the coming woman.

What, then, should be the system of education in our schools? Children have eyes, hands, and brains. On the use they make of these, depends their future. Let these be so trained as to render them capable of the greatest uses to which they can be

put. Flexner succeeds in freeing himself from the cloak of scholasticism, but, he might go further and envelop himself in the overalls of utility. Do not let the boy get to think that any honest work is degrading or any "clean" job superior. Many a doctor would be jubilant if he could earn and collect the wages enjoyed by a plumber. The man who can make a perfect chair is as worthy of respect as the theolog who can give a plausible explanation of 'how and why the Deity quit Moses and took up Wilhelm.

Economy is, going without something you do want, in case you should, some day, want something you probably won't want.
—Anthony Hope.

ANOTHER CROP SHORTAGE—BABIES

All over the war-stricken world, the statesmen and savants are discussing the means of closing the gaps torn in the humanity-mass by the Prussian fury. During and after the fighting, the vast need is and will be for men. Men must pay the bill; women must produce the men. Men and yet more men will be the cry for generations to come. All the achievements of human effort in the past pale into insignificance before the stupendous magnitude of the task embodied in one term "reconstruction." All the resources of science, art, physics, industry, invention, organization will be called upon to develop their last ounce of possibility in coping with the problems presenting themselves. And the very foundation-stone of the edifice is—*more babies.*

How can the women be induced to increase the baby crop? This problem can best be decided by studying the reasons for the limitation of offspring. And these are two, namely, the perils of childbirth and the grind of poverty. There are two examples:

The enthusiasm with which the twilight-anesthesia was welcomed all over the country revealed how deeply implanted is the dread of the agony of parturition. Unfortunately, as presented in the lay magazines, this movement took the shape of a scarcely disguised advertisement of a certain maternity-hospital, and its staff, in Germany; hence, quite naturally, the American medical profession revolted against such commercialism. Nevertheless, the re-

ception accorded this matter by the women demonstrated how widespread is the demand for relief from this suffering—and we, surely, are not deaf to such a demand on the part of our wives. Since our women have learned that this pain is not unavoidable, they rightfully call upon us doctors to secure them immunity from it; or, if we do not approve of the Freiburg methods, they ask that we provide some equally effective or better one. They are not devoted to any procedure, but, they want relief. And, they are in the right. It is up to us to meet their perfectly legitimate request.

The influence of financial stress is well illustrated by the record of the French people. In Canada, their race is prolific to an almost unparalleled degree. Large families are the rule and very large ones not unusual. When a law was passed granting 100 acres of land to any family that had raised 12 children, one applicant appeared and demanded 300 acres, as he had raised 36! Yet, the same race in France does not produce enough children to meet the mortality in times of peace. The French law requires that the property of a decedent shall be equally divided among his children. Under the working of this statute, the land has been subdivided until now the average farm consists of 4 acres—barely enough to support a couple with two children, even by the exercise of the most rigid economy and intensive cultivation. The French so love their homes that they do not emigrate willingly; so, how would a family fare with more children to be supported?

On the other hand, take this oft-quoted instance of the results following the removal of the financial stress laid by child-bearing: Mackenzie Wallace said, in his work on Russia, that the government had planned to institute a model foundling asylum. The wetnurse was recognized as the best means of feeding the infant. So, a wet-nurse was to be provided for every baby occupant. The nurse must be well fed, freed from exhausting labor, and relieved from worry, so that her service to the nursing should be strictly ideal; and, consequently, her allowances were liberal in the extreme. Result: Compared with the hard conditions of the average Russian peasant-woman, maternity was being made so attractive that every girl in the

neighborhood who by hook or crook could achieve motherhood did so. Then the newborn child was left at the door of the institution, and promptly the next morn the mother appeared upon the scene and—received the lucrative job of nursing her own babe! These experiences are typical.

We may sum up the question by concluding that the way—the only way—to increase materially the supply of babies is, to remove from women the fear of parturition, its pangs and its perils, and to relieve them of the anxiety and privation of meeting the living expenses of an increasing family.

Having babies is the first step, but, there are others. The waste of children dying during the first five years of life is appalling, and is one of the most discreditable features of our asserted modern civilization. The saving of these lives is a duty that should permit of no delay, but should call for the most serious exertion of our mental faculties.

The remedy is obvious—it is, to educate the mothers. Educate! Educate! Educate!

Assisting his small daughter with her geometry and to elucidate Cæsar's motives in refusing way to the Helvetians, this writer asked himself, Why the incredible stupidity of cramming all this stuff into the brains of our girls? What is the function of woman, if not to fill the duties of a wife and a mother? Then, why not educate them to know and do those things well and fully?

The studies most essential to women are physiology and sanitation. The diploma of graduation should be that of a trained nurse. Properly grounded in the fundamental principles, the graduate of the girls' high school should be fully qualified, after a post-graduate course of one year in the hospital, to take up Red-Cross work or perform the duties incumbent upon the head of a household. By omitting from the curriculum of the training-school those subjects that pertain wholly to the doctor, the one year would suffice for all that the nurse, as such, needs to know; and she would be the better nurse for not mixing up the doctor's duties with her own.

Summing the whole matter:

Make childbearing safe and painless to the mother and provide for her relief from worry about support for self and child

Educate the girl so that she will know how to take care of her baby after she has it.

Bourgeois is an epithet which the riffraff apply to what is respectable, and the aristocracy to what is decent.
—Anthony Hope.

THE MODERN POINT OF VIEW IN THE TEACHING OF HISTORY

This editorial is intended, not so much for the physician, whether he happens to be man or woman, as, rather, for the man or woman who happens to be a physician. And, if anybody is inclined to ask, "What the d— does it want in this galley," it may be pointed out that the physician is not only a healer of existing disease, not only a sanitary officer aiming to prevent disease, but, he is also a citizen and father of a family and interested in education. Hence, it comes about that an article on this subject that appeared in *The American Journal of Nursing* for July has aroused our lively interest and called forth sympathetic reading and comment.

The author of the article in question, Miss Jessie C. Evans, evidently a teacher of history in a Philadelphia school, depicts graphically the differences between old-time instruction (save the mark!) in history and the better way of today; castigating that old dry-as-dust method as an imposition upon the memory which was loaded with unliving facts and devoid of interest, unless the pupil was fortunate enough to listen to a true historian like the late Kuno Fischer, of Heidelberg, or Jakob Burckhard, of Basle, Switzerland, men who truly could bring the dead past to life and could conjure up, not the demon, but, the genie of history that guides the student through the lessons of the past to a better appreciation of the present.

In her very interesting article, Miss Evans shows how the routine teaching of history, as it was, has changed in recent years with the change of the aim that was to be attained. "Our object in studying what men have done in the past," she writes, "is not alone that we may have a specified amount of information, but, also that we may understand the society in which we live. Our government, our institutions, our style of building, our manner of living, even the fashions of our clothes are products of the past. The uneducated person does not appreciate his environment; it is like a picture without a

background or perspective. To the educated man, the automobile takes its place in the long line of improvements in transportation, from the ox-cart of our Aryan ancestors. He sees, too, that progress is the rule of the world's development, and can look forward to the day when every family will own its little car and many of us will do our traveling through the air. What does the word 'liberty' mean to the man who knows nothing of the struggles of people through all the ages to get the freedom which we now enjoy? Our representative government, our laws, our courts, our freedom from oppression are the products of historical development; and, to know what they mean, we must know how people lived without them and how men worked to make them ours."

In accordance with this new point of view, Miss Evans proceeds to show how those fortunate Philadelphia youngsters are taught history that has truly become the history of civilization rather than "kulturgeschichte." The program is tempting, and one might wish to be able to sit down with those kiddies and learn it all over again. Truly, such a training as is given to these children, such an understanding and sympathetic familiarity with the trials and struggles and the acquirements of the past, such logical and instructive guides to an appreciation of the present must go far toward making the youngsters better citizens; for the very reason that they understand and realize the causes and the nature of what is imperfect, and, understanding the difficulties in the way of improvement, are in a position to do their share in perfecting it to sensible, reasonable, and, therefore, best advantage.

And, what has all this to do in a medical journal? The writer personally, and a great many other physicians, to his positive knowledge, always have liked historical reading, and it occurs to him that this would constitute a splendid hobby for the physician. Every medical man, be he ever so busy, should give one hour a day to his family, and some of these hours could be spent usefully in the study of civilization; and, not so much from books, but, as the Philadelphia teachers are doing, by discussions, by making children find out the problems themselves, and then examining how the people of old met these same problems. The physician's profession tends to

give him a keener insight into the struggles of persons and, therefore, of families, of communities, of nations. It is for this reason that a physician who has mastered the subject himself would make a most excellent teacher and mentor for his children, and, in turn, would become a better physician because of it, for the reason that his understanding of the workings of the human mind and his sympathy with human failings and mental difficulties would be deepened and enhanced.

There is an unbelief that grows out of ignorance, as well as a scepticism that is born of intelligence.
—Ignatius Donnelly.

THE BLACK SILK DRESS

One of the dailies describes a scene in which an old lady in a black silk dress breaks down and weeps on the shoulder of her son, who, the straps of an officer decorating him, is marching off to the war.

A black silk! Did you know there is such a thing? You youngsters, I mean. You other youngsters now in your fifties, do you remember the days of this garment of respectability, this pledge of success in the battle of life? No, we shall have to go to the older men, whose memories go back to the Civil War and the period preceding it—they will not have forgotten. For, was it not our sainted mothers who, with discreet and humble pride, displayed the long-coveted acquisition? For, was not the Black Silk Dress the symbol of our having arrived, the pledge of membership in the then Fourhundred?

Let's lay aside for the moment our everyday engrossments and reminiscence a bit. Drop the busy scalpel, let the ubiquitous microbe have a breathing-spell, and recall the hours of early youth—and Mother!

If there still is an uncalled-for spot in the human heart, it is that which warms and softens at the thought of Mother. Motherhood is the most sacred thing in creation, and the one most unconsciously revered. Let a flaunting young miss board a car with a child—she is not really its mother, only a deputy; yet, how she preens and displays her importance—and how every man in the car instantly becomes her coadjutor. But, who can fathom the devotion of the real mother! When we recollect what ours did and endured for us, and then recall the thoughtless cruelty we returned her in those days, it seems the mystery

of mysteries that she did not wring our necks, instead of immolating herself for us.

Her clothes? The black silk was the culmination of years of effort and denial. Arising in the morning, she donned a calico—a species long since extinct. The heavy work done, along in the afternoon, the morning garb was changed for a freshly laundered gingham. She was then ready for company, for callers. When she went calling, she assumed her church-costume, a delaine. Other fabrics there were, the appellations of which linger in memory; however, what they were or what special occasion called for their donning was and is an unknown region to the masculine mind—there were debeige, mohair, dimity, marseilles, alpaca. It is different with "diaper"—that word brings back memories of a period that seemed heavenly to the female, retributive, though, to them all. Bombazine was devoted exclusively to the widow, assumed by her on the departure of her liege-lord and was worn until she joined him in the final sleep. Rather costly at the start, this bombazine, nevertheless, was a money-saver, for, that one dress lasted for the rest of life never changing in style or trim. Its plain folds of rusty black covered the scrawny length of its owner, and the two seemed one and inseparable. Without doubt, she slept in it. The Good Black Silk was the ideal toward which years of effort were directed. For it, the eggs were gathered and sold to the storekeeper, the early rhubarb and asparagus were cut, the rags were saved and sorted, the soapfat was scraped into malodorous receptacles, old bottles, corks, papers, garden-herbs, all sorts of extra and out of the account salables were put aside until in time the man came around; and the pennies thus won were hoarded away until the dollars needed were, at last, accumulated. For, the Good Black Silk was distinctively a product of feminine saving—to apply to its purchase any of the regular sources of income would have been to argue a degree of extravagance that would have ruined the credit of the soft man who permitted it. The little trifles beneath his dignity to take into account were free to the gleaner whose spirit could compass such things.

At last the sum was completed, it was drawn out from the famed stocking- or teapot-bank, and was counted and recounted. It was enough! Now for the purchase. The stores of the village were visited. Not

hastily or heedlessly was this important investment made. The silk must be of the very best quality. Not for a moment would a sample inferior to Samantha's be considered. Probably it was decided to wait until Mr. Semple went to the city for goods and entrust him with the commission, not even if it necessitated another year's collection would one put up with an inferior quality of goods!

The piece of cloth came to the home. It was critically inspected, smoothed over lovingly, tested by the feel, held to the light, compared with bits from Lydia's, Julia's, and Sarah Ann's. Satisfied with the goods, the momentous questions of cut and trim now came to the fore. And the making—whether to call in the aid of the town dressmaker, at a cost of a dollar, or to depend upon the aid of Sally Lunn, who was expert in cutting and fitting.

For a whole week, the house is in turmoil—the beds and chairs covered with patterns and various feminine belongings, the feminine heads filled with ditto, the men uncomfortably browsing around as best they can, shrieked at whenever they go to sit down, mostly finding the outside of the house more comfortable for the nonce.

The dress is completed, and Sunday comes. Church-bells ring, and Mother appears, her eyes shining with happy pride. What a wonderful dress it is. Such quality—why, it would almost stand alone, the silk's so heavy. It is very much to be feared that eyes and thoughts were directed at Mary and her new silk more than at the minister. Even Mrs. Maxwell glances over with quiet approval. She wears the only moiré antique in town—but, that, of course—she is Mrs. Maxwell. After the services, many a friend comes up for a word of appreciation. If there is a sense of envy, it is bravely suppressed, and more often the friend wears a look betokening a stern resolve to have one like it, if the family never eat another egg.

Home again, the new silk is taken off, wrapped in tissue paper and linen and reverently laid away, while Mother gets into comfort again with her calico and proceeds to demonstrate what a grand and glorious thing a home Sunday dinner can be when the Boss has a new Black Silk.

Gear we have, and luxury envelopes us of which the dear woman never dreamed, a lifetime of pleasant recollections lies between then and now; but, wouldn't we give

it all, to be a boy again, sitting at that Sunday dinner-table, with Mother serving, and upstairs, in the bureau-drawer, her New Black Silk.

It is well enough to have faith in humanity, but, it is much more important that humanity should have faith in you.

A REAL DOCTOR—AND A REAL WOMAN, TOO

We have occasionally felt impelled to give the women a gentle slam, not because of any dislike—heavens, no!—for the sex, but, because we saw that they needed it. When a bunch of them get together and start to ventilating their actual, low-down opinion of the “tyrant brute,” man, they sure add to the gayety of nations. But, this does not interfere with our consciousness that woman, *en masse*, suffers under the weight of a load of unutilized capacities; that the best and keenest and quickest half of the composite human intellect is suffered to go to waste in our social system, while the possessors of this rusting machinery are rendered so uncomfortable by their load that they make life miserable for us, without really knowing why.

We have passively opposed the entrance of women into medicine, partly because we do not believe them physically qualified to withstand the work and exposure incident to this life; mainly, though, because one of the most charming girls we ever met killed herself trying to do the work of a doctor in the city-slums. Five years saw her finished by intestinal tuberculosis. All hours, all weathers, even when menstruating, she was paddling through slush and rain, attending a lot of creatures, not one of whom was worth the sacrifice. Our girls are too valuable to be thus wasted; they should not be allowed to practice, unless they associate themselves with men-physicians, who can relieve their women-partners of such work as is not fit for them. Then—oh, that's different; no mere man could possibly have been the aid to us that a gifted nurse has been.

But, here is a case that, as an exception, proves the rule:

Doctor, get down into your pockets and dig up two dimes, which enclose to *The Woman's Medical Journal*, asking for the number for last August. If you don't feel satisfied with the result and glad we told you, we will cheerfully trephine you

gratis and inject the serum of appreciation even if we have to draw the supply from our own veins.

A woman, who practices medicine in a rural district in California, presents a detail of her customary work. It is an epic—or, would be if it were not so usual an experience for the “real thing,” the country doctor. Man or woman, were we on the examining board, we should pass that doctor to what she wants, an army surgeon's commission, without the frivolity of any examination, but, solely on that record of work done. We will admit at once that she is fit, physically, mentally, and professionally, to be entrusted with the arduous duties of the service, whatever they may develop. We should, however, go a step further and draft that husband of hers to attend her as chauffeur. Any man who would let his doctor-wife travel by automobile 106 miles through the Sierra Nevadas to Lake Tahoe, to attend him for a “slight neuritis,” ought to be sent at once to the front of the front.

Here is the peroration of her report: “I do my own work, can fruit, make jellies, pickles, crochet, belong to three lodges, started a Red Cross chapter, am giving first aid lessons, studying French, can cook, drive a horse or car, shoot any firearm and hit bullseye, say a prayer for the wayward, laugh at the birth of an heir and shed a tear at the bier of some loved one.” Then, as all this does not seem to “fill her life,” she wants to go to the wars!

All this after a record of practice among the mines, dredgers, and lumber-camps, without nurses, and the hospital 22 miles away; “went to jail with a case of D. T.'s as there was the only padded room and nobody else could keep him quiet;” “do x-ray plates before and after fractures;” “emery, cinders, scales, steel in eye, amputations of fingers and toes, fractures of hip and of skull; one-side jaw fractured, the other dislocated; rounding up stray leper, mastoid abscess, electric burns, and plenty more.”

Some woman! Some doctor! Hats off, you pampered city doctors!

PENSION OR INSURANCE?

How much has the Government paid out in pensions since the close of the Civil War? The curious in statistics may look the matter up; we are content to believe

that even in this day of computation by billions the total sum is stupendous. Between four and five billions of dollars have been distributed among the men who took up arms in the defense of the Union. The political trimmer who now seeks to cipher out a majority of votes for the pro-German, the twentieth-century representative of the copperhead of the sixties, may take comfort, if he can, in the fact that no prominent leader of any party since the Civil War has dared to protest against this disbursement. He may compute as adherents the Germans, the Scandinavians, the conscientious objectors and pacifists, the parents whose sons were drafted, and any other strays, including the I. W. W.'s, anarchists, professional agitators, and Sinn Feiners, and figure out a majority for himself; but, he will be woefully mistaken.

Such a one does not realize, when "Johnny comes marching home" from France with a medal decorating his manly breast, when Jimmy passes with an empty sleeve, when Mother bends over the grave of the one who fell, that there will be no prouder people on earth than these same mothers; and that only the fiercest detestation awaits those men who helped to sacrifice the flower of our land, by withholding the supplies and reinforcements that would have saved them and ended the fighting sooner. The men who opposed the war will be so ashamed of that fact that they will exhaust the excuse factory, and the Ananias club will have shoals of recruits as they try to wriggle out of their dastardly history.

The pension-system has its disadvantages. To a man still in the period when active exertion is possible, there is a certain numbing influence about a fixed income—one so easily falls into the habit of depending upon it, of regulating outlays by this assured stipend. There are so many pleasant things one can do in this lovely world, and that enterprise we have in mind can wait another week, the while we go fishing. Then we need a week's rest, then a little trip to the city, then comes the big meeting and we've got to get there with the boys. So the time goes—we really do not "have" to do things hard and toilsome, for we are sure of our living—good old Uncle Sam has guaranteed that.

Now take the insurance-system: The death or disability of the soldier gives his dependents or himself a lump sum. It is

enough to buy and stock a small farm, a workshop or a business, capable of yielding a living. Partial disability is met by commensurate allowances. Illness is treated in the government hospitals or by government physicians and nurses. Instead of being a lifelong pensioner, the ex-soldier has what might have been his savings for the time of his service, ready for investment under his own eye, for management by whatever stock of brain-capital he may possess.

He may lose his capital and be helpless? Yes, surely. But, why should we assume that, because a man faces the enemy's bullets in defense of our country, he thereby becomes an imbecile! That risk is one that every man has to face. Why should anyone be relieved of that? There has been prevalent entirely too much of that sort of thing and it is time we took a saner view of the matter. Be assured that this great and wealthy country will never let its defenders starve in their old age. If the need comes, there will be soldiers' homes open to those who stand in actual danger of want.

Neither pension nor insurance can possibly meet every case, neither can any other scheme that may be devised. Each will have its advocates, with plausible arguments and telling examples to sustain the position. However, the insurance method seems more American, more suitable to our genius and less demoralizing than is pensioning. Whether it is likely to prove more or less expensive, is hardly a matter for consideration—we are looking at it from the standpoint of the soldier's best interests. Our armies are made up of young men. Few of these would choose a fat pension and an easy, effortless life to the immediate possession of capital enough to start a business and the opportunity to show what is in them. Dealing with men well past the meridian of life, whose bolts have been shot, their possibilities tested and their place on the life-ladder fixed, it would be different.

As we write, we have in mind a friend of youth who lost a hand while working in a sawmill. He received a lump sum in recompense, took a commercial college course, then embarked in the real-estate and insurance business, and when we last heard of him he was employing a dozen men at the wages that he had earned in the saw mill. Suppose that a monthly pen-

sion had reduced him to the status of the rather contemptible "remittance man!"

Then, as to the openings for employment, in the public services or elsewhere—what chance has any mere civilian had against an old soldier since the Civil War? What made Harrison, Taylor, and Grant presidents? What candidate has ever been able to withstand the withering sarcasm that asked him, "Where were you when the enemy assailed our flag?" You may say, "I did not believe in war," "I had a brother in the German army," "I felt we were wrong in going to war before the enemy had landed on our shores to treat our women as they did the Belgians," "It was a Wall-Street war," "The munition-factories were making money out of the war." By that time, the crowd taking in your opponent's empty sleeve, would be ready to ride you out of town on a rail and send along any man who would vote for you. Think that is overdrawn? Wait and see. Or, look back fifty years.

Don't be a howler. The coyote is a great howler, and he is the biggest coward in the world. One of him sounds like a dozen, and can throw a full-grown scare into the uninitiated, but those who know his habits are not disturbed. It is the same way with the knocker—those who know him pay no attention to his vaporings, but it is the stranger who gets wrong impressions from the man who always has his hammer handy.

—Falfurrias Facts.

THE SILVER ANNIVERSARY OF "CLINICAL MEDICINE"

The next year's volume of *CLINICAL MEDICINE*, beginning with the January issue, will be the twenty-fifth of its existence and will complete a quarter-century of unremitting effort to stimulate and support definite and positive methods of treatment, to foster an optimistic, confident attitude on the part of the physician in his dealings with his patients, as also with his colleagues, to encourage the treatment of patients rather than of diseases, and to aid in the progress of medicine in all its departments, to the best of its ability.

While we reserve discussion of these twenty-five years of effort for the initial number of the volume, we wish here to announce the fact. Also, we want your co-operation to make the next number, and the next volume, the best ever. We have said it so often—this is your journal; it will be as you make it; good, or bad, or indifferent. It is the doctor's journal, for the doctor and by the doctor, meaning the

practitioner in the field of active practice. Therefore, help us to conduct your journal. Write and tell us of your experiences, of your observations, and give us your opinions concerning matters that are of interest to you, to us all.

TOBACCO, AND ABDOMINAL PAIN

That tobacco will stimulate peristalsis, is a well-known fact; however, that this stimulation may be of such an extreme degree as to produce a tetanic contraction, with obstinate constipation, an assertion made by Dr. L. W. Littig, of Davenport, Iowa, in the October number of *The Medical Herald*, presumably is not generally understood; nevertheless, it is supported by a statement of Cushny's, to the effect that there may be a tetanic contraction of the whole intestine, following the absorption of nicotine, with almost complete obliteration of the intestinal lumen. So, also, Sollman declares, in the last edition of his textbook on pharmacology, that nicotine produces violent peristalsis proceeding to intense spasmodic contractions.

Doctor Littig illustrates these statements by the experience of a certain unnamed member of The American Medical Association. This physician, somewhat past the age of fifty, never had used tobacco in any form, but, now began to indulge in an occasional cigarette. During various trips to medical meetings, he devoted himself wholeheartedly to sacrificing large numbers of "coffin-nails" to My Lady Nicotine, with the result that each time he experienced attacks of severe abdominal pain associated with most obstinate constipation, arousing the fear of some surgical condition being present. This pain would vanish after a lapse of several days, and then there occurred free movements of the bowels, these consisting largely of hard masses, some bearing the imprint of a contracted sacculated colon.

The possible connection between this pain and the tobacco-smoking was suggested by Dr. George Dock, of St. Louis, whereupon the subject deliberately induced several attacks by smoking numerous cigarettes, and thus established the fact that the abdominal pain always followed what for him was a very immoderate use of the weed, and that always it was associated with obstinate constipation; always, however, disappearing with a free movement of the bowels within

twenty-four and forty-eight hours after the smoking of cigarettes was discontinued.

Now, here is a symptom-complex determined by a graphic personal experience and supported by certain experimental data that may throw light upon many conditions that may have been obscure. About two years ago, the present writer consulted a leading Chicago physician with regard to a severe paroxysmal abdominal pain occurring at intervals; and he remained for several days in the hospital for observation. No diagnosis was made at the time. In the course of the last year, several men, some surgeons, others internists, were consulted, and Dr. Frederick Tice was the only one who, quite tentatively, suggested that an excessive use of tobacco might, possibly, stand in relation. Within the last two weeks, cigars were practically discontinued while pipe-smoking is being indulged in to a moderate degree, in addition to two or three cigarettes in the course of the twenty-four hours—which is very much less than this writer has been accustomed to for more than thirty years. The results do not yet warrant any definite conclusion; yet, the abdominal distress has all but disappeared. Here is a point well worth remembering.

We must bear in mind, that, however much a suggestion to give up the use of tobacco may tickle one's fancy (of course, only the other fellow's fancy, never that of him who is expected to swear off), it is a serious fact that many forms of abdominal pain are encountered in which a tentative diagnosis of a surgical condition is made and which even come to operation, without any definite curative results. The question of tobacco poisoning, chronic or acute, may well be considered and investigated, in this connection.

It isn't New York's artistic progress that shows the development of this nation. It is the things they are thinking, and doing, and learning in Backwash, Nebraska, that mark time for these United States.
—Edna Ferber.

THE TUBERCULOUS COW

Is there any tenet in medical science that is not open to question? Really, it

seems impossible for doctors to agree even upon the most vital and fundamental principles. Take, for instance, this example:

In *The American Journal of Public Health*, Doctor Winchester, chairman of the American Veterinary Association, arraigns the tuberculous cow as a common, or public, nuisance. "That the milk from such animals is an annoyance to the public generally, is shown by the percentage of human beings whose death has been caused, or who have been made cripples, by its use."

Has this assertion ever been proved? Is it provable? When having to deal with tuberculosis in the child, how are we to determine that the infection came from the milk, when there are so many other avenues by which it could have been introduced? Koch denied that bovine tuberculosis was imparted to man; and, while it seems reasonably certain that this assertion was too sweeping, still, it is acknowledged that this type of bacillus is not nearly as prevalent as the human form if it. Park gives these figures: Adults over 16 years of age, 940 human tuberculosis, 15 bovine; 5 to 16 years of age, 131 human, 46 bovine; under 5 years, 292 human, 76 bovine.

Still, we fail to find in the article quoted any attempt to show that these bovine infections were transmitted by the milk—that is a mere assumption. We should feel inclined rather to place the blame upon the multitudinous flies that infest the barnyards.

In the meantime, Dr. W. M. Gregory flatly contradicts the assertion that the milk of tuberculous cattle is perilous, but, quite the contrary, that its use imparts immunity against tuberculosis; this milk being alleged to contain the antibodies that protect humans against that form of infection.

Which of these views is in accord with modern science? Which receives most support from clinical observations? Please, do not seek to settle the dispute by the citation of authorities—authorities rarely know anything about the subject they seek to fatten down with the weight of their illustrious names.



Leading Articles

Internal Salve-Treatment for Colitis and Gastric Ulcer

By A. L. BENEDICT, A. M., M. D., Buffalo, New York

Member of the American Gastroenterologic Association; Author of "Golden Rules of Dietetics,"
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AROUND about 1895, the writer was consulted in regard to a case of pseudo-membranous colitis in a woman of about 25. The condition was of several years standing and dated back to an overdose of arsenic prescribed by a physician while drunk. At this time, cases of Civil-War "dysentery" still were not very rare, while colitis of various grades and manifestations was, as it still is, very common and very resistant to established modes of treatment.

After trying various dietetic and medicinal measures—including astringent injections, which sometimes cure long-standing "colitis" (obviously, rather a proto-sigmoiditis) with astonishing rapidity—but, gaining nothing, the idea was conceived that something might be accomplished if the lesion could be reduced to the status of a chronic sore and treated with a soothing salve.

It was plain, of course, that the time-honored definitions of emollient and demulcent did not quite apply to the lesion in question. Mucilaginous and gelatinous preparations were too soluble, more or less liable to fermentation, if not strictly digestible. It would be quite impossible to confine an ointment to any particular part of the alimentary canal, but, one would have to depend upon the fugitive action of some application in transit, and this would have to be as nearly as possible free from harmful effects, either by virtue of absorption or of local action upon normal mucous membrane. The comparatively large list of true fats and oils, although most of them well adapted to external use as ointment-bases, and often employed, especially in the form of olive-oil, internally,

also must be eliminated. For, if absorbed with anything like normal rapidity, their local action practically would be limited to the stomach and upper small intestine. If digested with anything like normal rapidity and completeness, fairly complete and rapid absorption would be almost inevitable. At any rate, one or more of the following objections seemed inevitable: elimination of therapeutic effect by absorption or else marked cathartic action, even by oils not possessed of definite irritant active principles, such as castor-oil; excess of fat metabolism, possibly eventuating in acid intoxication; irritant action of cleavage-products of fats in the intestine—glycerin and fatty acids combining with alkalies to form soaps; formation of gritty magnesium and calcium soaps, with the possibility of production of concretions; bacterial rancidity.

Having eliminated the true fats and oils from consideration, mineral oil naturally suggested itself, as being unchanged by ferments, unabsorbable and nonputrefying. The practical difficulty was, to obtain a mineral oil free from volatile impurities, which are not only disgusting to the patient, but even of some toxic importance. At the time, a fairly clear mineral oil, marketed mainly for sprays, was employed, and, though by no means free from volatile hydrocarbons of the $C_{10}H_{20+2}$ series and other impurities, the patient persevered in its use, and she progressed to a perfect, although rather slow, recovery.

Liquid Paraffin Found Serviceable

In 1889, being convinced from subsequent experience that the mineral-oil treat-

ment of irritative and inflammatory lesions of the alimentary canal was efficient, but, hampered or absolutely prevented in many instances by the impurities mentioned, an oil of nearly absolute purity was obtained through the help of Mr. A. Gunnison, of New York, and placed on the market under the name of *purpetrol*. For practical reasons, it was found necessary to employ Russian oil, although even then there seemed to be no essential reason why American crude oil might not be refined to the proper degree. This presumption has subsequently been justified. The lack of business incentive on the one hand and obvious ethical reasons on the other, have resulted in limiting the availability of this oil mainly to Buffalo; however, anyone interested may obtain it from Plimpton, Cowan & Co., of that city. It should be expressly understood that any mineral oil which is neutral and virtually devoid of color, odor, and taste—not confusing the peculiar smooth oily *feeling* with taste—will answer perfectly well; still, in the writer's experience, most of the mineral oils that are satisfactory for sprays are not sufficiently pure for satisfactory internal administration.

Mineral oil, in and of itself, acts as a laxative and may be so employed in doses of about 15 mls (Cc.), preferably taken midway between meals and late in the evening in order to prevent any possible interference with the mixture of gastric juice and stomach contents. It should be understood, though, that this laxative action is purely mechanical, a matter of lubrication and prevention of scybalous formations, and not one of peristaltic stimulation. This oil no more "makes the bowels move" than does axle-grease make a wheel turn.

Its Mode of Action

Mineral oil is also useful as a palliative in various strictures of the alimentary canal, esophageal, cardiac, pyloric, intestinal and others. Its lack of toxicity (this statement applying only to an oil of practically absolute purity) has been demonstrated clinically by its use in a large number of cases for months or even several years, also by the accumulation of several pints of it in the intestine, in cases of intestinal cancer, without apparent ill effect (although it must, of course, be admitted that the opportunity for demonstrating the accumulation predicates the death of the pa-

tient). It often is necessary to reinforce the purely lubricative action by true cathartics. In several cases of apparently hopeless chronic constipation, of many years' standing, normal action of the bowels has ultimately been restored after two or three years' pretty steady use of mineral oil. This fact is stated, however, not so much to claim for it a distinct curative effect, as to illustrate the lack of toxicity and that greater and greater dependence upon drugs is not the result, as is the case with the majority of active cathartics. Simply to render the oil less insipid, it is advisable to add enough menthol, methyl salicylate, cinnamon or other essential oil to give a flavor, without introducing an appreciable dose, unless indicated for some special reason.

It is doubtful whether mineral oil exerts any direct antiseptic action in the alimentary canal or elsewhere. However, in an indirect way, it does have such action: In the first place, it is absolutely resistant to bacterial changes in itself. Secondly, by favoring free intestinal evacuation, it reduces the ordinary clinical signs of intestinal putrefaction, gas, odor, indicanuria. Externally, it has been proved to have a favorable action in smallpox, erysipelas, etcetera; probably, though, merely by excluding air. However before abandoning general practice, the writer employed 5- to 10-percent solutions of menthol or salol in mineral oil for erysipelas, with cure resulting in four days. It may be stated, in passing, that a 5-percent solution of salol in mineral oil affords marked relief in rheumatic affections of the throat and esophagus.

It should be distinctly understood that mineral oil is absolutely devoid of nutritive action and that it is extremely doubtful whether the small percentage not recoverable in the feces represents absorption, so that the burden of proof rests with those who claim that its internal administration has an effect on the deeper air-passages or any other structure with which it is not brought into direct contact. Any talk about mineral oil as a "codliver-oil substitute" is nonsense. As to the therapeutic effect of volatile ingredients of more or less crude petroleum, in the air-passages or elsewhere, no opinion is expressed.

It may be stated, in this connection, that mineral oil often affords marked relief of

symptoms considered characteristic of gallstone, often amounting practically to a cure. It is not a solvent of calculi *in vitro*, although calculi may crumble somewhat more easily after long immersion; and, if it were a solvent, it would be irrational to suppose either that the oil reached the gall-bladder by absorption and excretion or, in adequate amount, by working up through the bile-duct. Undoubtedly the oil does penetrate the duct to some extent and thus may assist the passage of a calculus already in process of extrusion. Probably the beneficial effect is to be explained partly by the fact that gallstone symptoms often indicate mere cholecystitis or choledochitis or even dodecalitis (usually improperly called duodenitis) or a reflex hyperchlorhydria or pylorospasm, which may be more or less amenable to relief from the direct effect of the oil or its indirect influence in lessening gastric and duodenal reflexes, intestinal putrefaction, et cetera. Nor must the value of concomitant dietetic and medicinal measures be forgotten.

One of the most brilliant therapeutic triumphs that the writer has ever witnessed—in the rapidity of action, relief of pain, and permanent result—was the effect of a copious enema of plain purpetrol given to a little boy shrieking with agony on a bedpan, with constant tenesmus and dysenteric passages. Whether the condition was one merely of proctitis of unexplained origin or whether there was an intussusception, never was learnt. For all sorts of lesions low in the large intestine, such enemata have, in the writer's experience, afforded both transient relief and abatement of inflammation.

The distance to which such enemata can penetrate is a matter of great practical interest. The writer has passed through three successive stages with regard to high enemata discharged through a long soft tube: (1) mortification at the buckling, turning, and twisting of such tubes in the infravalvular portion of the rectum, in his own clumsy efforts; (2) willingness to admit personal inability to introduce a soft tube for two or more feet, while granting its possibility in more skilful hands; (3) skepticism that anybody can "push on the reins." Still, it has been abundantly proved, by various means, that liquids introduced within the anus may penetrate to a considerable height, either by antiperistalsis or

by the assistance of gravity, air spraying, and so forth.

X-ray examinations show that bismuth emulsions—for which mineral oil is an excellent excipient—reach the cecum in a few minutes after introduction in the rectum. The writer is inclined to interpret some of the radiograms offered as evidence, as indicative merely of a long sigmoid flexure, whose upper extremity is mistaken for the cecum; but, it can not be doubted that in many, if not in the majority, of instances, enemata reach the cecum in a few minutes. If the sigmoid flexure can be named after a letter of an alphabet at all, it should be U, V or lambda, and not after the "S romanum," according to the German expression, and least of all after the sigma. However, there is no doubt that mineral-oil enemata, whether for diagnostic or therapeutic purposes, penetrate to a considerable distance, while the disagreeable experiences of patients who trust their sphincters too much prove beyond doubt that both the oil and the emulsified substances reach the entire length of the alimentary canal when administered by mouth.

Type of Internal Healing Salve

In colitis, using this term to include, not only an inflammation of the colon generally, but of any particular part—if the differential diagnosis can be made—as a typhilitis, sigmoiditis, or even a high proctitis above the reach of ordinary applications, etc., and including many cases in which the appendix itself is involved, although not in an exclusive and intensive degree, the type of "internal salve" most used by the writer may be stated as follows:

Menthol	3 parts
Bismuth Subcarbonate	15 parts
Purpetrol	450 parts

The dose of this mixture is, 15 mls (one tablespoonful) about three hours after meals.

It may be advisable to reduce the menthol to a mere flavor or occasionally to increase it. The dose of bismuth also may be varied. If an especially astringent action is needed, the subgallate of bismuth may be employed, or, if absorption is aimed at, as in a case of typhlocolecitis (inflammation of cecum and appendix) with marked thickening, the subiodide of bismuth may be substituted, perhaps in less dose. Magnesium oxide, binoxide, or sepia (prob-

ably no better than chalk), kaolin, charcoal, besides various other heavy powders, may be employed. In place of or as an addition to the menthol, camphor, salol, volatile oils, etc., may be used. Bismuth salicylate also may be used, either with regard to a more marked antiseptic action (which, for the bowel, means more a diminution of virulence than of numbers of bacteria, and certainly never approaches sterility) or for antagonizing a rheumatic state or for the stimulant action of the salicylates on the bile, thus *favoring*, although in no very dependable degree, the solution of gallstones or at least tending to prevent their formation.

Concerning Other Gastrointestinal Diseases

For gastric ulcer, in the early stages, the writer inclines to keeping the stomach as empty as possible, especially of liquids, because of the liability to perforation, so that, if bismuth or any similar powder is used, it seems safer to wash it down with a minimum of water. In the later stages or in non-peptic types of ulcers, with little tendency to perforation, an internal salve seems most appropriate. However, if there is any tendency to hyperchlorhydria or in cases in which hyperemia still is to be feared, instead of welcomed as a preliminary to repair, menthol is contraindicated. Here, small doses of camphor may be substituted, while the dose of the appropriate bismuth salt well may be increased.

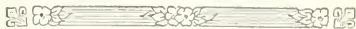
In hyperchlorhydria, camphor, magnesia, and bismuth subcarbonate or subgallate may be combined, and the salve may be administered, not with caution against interfering with the action of the gastric juice, but, so as to diminish secretion, if possible; consequently one or two hours after a meal, instead of at a later time.

Duodenal conditions are often confused with those of the stomach, perhaps inevitably so in our present state of progress. At any rate, approximately the same line of treatment is appropriate, and it is possible that the effect in hyperchlorhydria

is not so much direct as through influencing a duodenal inflammation or ulcer that is acting as a reflex stimulant of the acid secretion by the stomach. It must not be forgotten that at present there is as great a tendency to exaggerate the frequency of duodenal ulcer as there formerly was to include it with gastric ulcer or to ignore its general nature altogether.

Plain purpetrol has been prescribed in quite a number of cases of alimentary obstruction, mainly of cancerous nature and affecting either the esophagus, the pylorus or some part of the intestine, with the sole idea of lubricating and thus maintaining some degree of patulence as long as possible. It is scarcely necessary to say that this treatment has been confined to inoperable cases and to a few theoretically operable, but, for which operation was contraindicated by the general condition or was absolutely refused by the patient.

Obviously, no result that could, in any sense, be regarded as curative has been accomplished, except in a few instances of nonmalignant nature and for which the greater ease of passage through an obstructed or spasmodically contracted portion has favored nutrition and indirectly aided the action of other measures. It clearly is impossible to state as a demonstrated fact that patulence has been maintained longer than might have occurred without this means, though this impression exists for most cases. With considerable hesitation, it may also be stated that in several cases it has seemed that the mineral oil may have retarded the development of a cancerous lesion. For example, a case of high rectal cancer pronounced inoperable by a competent surgeon was kept free from stricture and the patient in fair general health for two and a half years, when death resulted after a brief confinement to the house; there being then extensive metastases, mainly in the liver. Treatment here consisted in local applications of organic silver, high-frequency current to the rectum, and the liberal internal use of mineral oil.



A Specific Treatment for Tuberculosis

By W. C. GOODWIN, M. D., Philadelphia, Pa.

EDITORIAL COMMENT.—The readers of "Clinical Medicine" will remember several earlier contributions by Doctor Goodwin devoted to the same subject with which he deals in his present paper. He is convinced that tuberculosis, as it is seen in actual practice by the physician, always is complicated with syphilis and that it is the latter factor that renders the malady so refractory to treatment. His insistence upon using calcium sulphide and the sulphocarbolates evidently is due to a wide and favorable clinical experience, and, we confess that his faith in his method is most persuasive.

IN treating tuberculosis, it is necessary to keep in mind the essential nature of the disease. Tuberculosis, as clinically seen, differs materially from the traditional tuberculosis of the books. It is a passive disease, not an active one. It is easily and quickly curable. It always appears as a complication. It is characterized by the presence of the bacilli in the sputum, the rales and rubs, the cavities and pus, the altered respiratory ratio, the deformed thorax, the fever and hemorrhage. As will be observed, these are almost all signs, and the list is almost complete.

On the other hand, its ever present complication, hereditary lues, presents a very different picture. With it, we have the coughs and colds, the disgusting expectoration, the restlessness, nervousness, sleeplessness, anorexia, adynamia, tired and draggy feeling, anemia, pleurisy, neuritis, rheumatism, constipation, and the depression. And the here enumerated symptoms are but a small part of the list; and, then, too, they are so different in character from the signs of tuberculosis named. They are symptoms, using the word to indicate a systemic reaction.

As stated above, tuberculosis is easily and quickly cured. On the other hand, the treatment of hereditary lues requires time and care and experience; and that there are many unexpected turns in its course, goes without saying. It is a very light case of hereditary lues that can be at all satisfactorily treated in two years—and one that is not likely to consult a physician under present conditions. The writer often has cured first-stage tuberculosis within two months.

The treatment of lues requires the education of the patient in the new conditions. He must be convinced that it is possible to get well and to keep so, and that it is better not to wait for an acute attack of some predominant symptom, when the difficulty of treatment always is

greatly increased, in addition to the ever present temptation both to patient and physician to hurry through the course. Taking time and being cautious are of eminent importance here. Sclerosis of the veins and arteries must first be reduced before anything like a satisfactory routine of treatment is possible.

The Luetic Element in Tuberculosis

In all his preceding articles, the writer has insistently shown that tuberculosis of the conventionally understood type really is tuberculosis and hereditary syphilis in association. Unless this point is thoroughly understood, the physician can not hope for success. Equally must it be understood that calcium sulphide does kill the tubercle-bacillus, that the sulphocarbolates do heal the tuberculous enteric ulcer that causes the characteristic fever, and the hereditary syphilis always is present and always must be considered in the treatment. The spirochæta pallida and the tubercle-bacillus are jointly responsible for clinical "tuberculosis" of the lungs. Many of the most common symptoms usually associated with "tuberculosis" are those of hereditary syphilis.

The basis upon which the differential diagnosis at present rests is, the intravenous use of mercury. Those symptoms that yield permanently to intravenous mercury, and to that alone, may safely be put down to the credit of syphilis.

Syphilis is a true hereditary disease, the mother and father transmitting, not alone the disease, but, the predominant symptoms that they themselves possess. The seat of the hereditarily transmitted spirochete is in the lymph-system and from there it finds its way to the embryo in the womb.

Illustrations of Cures Effected

I here will review three cases cured by my method.

Case 1, taken from 1912 files and not previously reported. Female, white, aged

24; nativity, Philadelphia; occupation, book keeper and secretary. Family history: Father died at the age of 60 years. He was insane for several years previous to his death. Mother is living at the age of 61 years; an invalid with a long nervous history and many severe sicknesses. One sister, a missionary, died of African fever; second sister is living at the age of 22 years; very nervous and suffering from functional heart disease. Third sister is

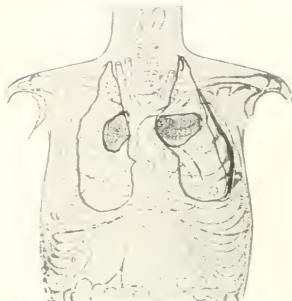


Fig. 1.—Case 1. Partially healed cavities. Front.

living at the age of 19 years; shows marked traces of nervousness.

The patient complains of loss of weight, cough, expectoration, catching colds, a tired and "draggy" feeling, adynamia, anorexia, restlessness, sleeplessness, headaches, backaches. She suffers from tuberculophobia. She has a coated tongue. Her greatest weight has been 137 pounds—in 1909 at the Chestnut Hill Sanatorium; her lowest has been 100 1-2 pounds; her present weight is 105 pounds. She was admitted to the White Haven Sanatorium for tuberculous patients in June, 1909, and remained there until September, 1909. She entered the Chestnut Hill Sanatorium for tuberculosis in October, 1909, and remained there until July, 1910. She was under the care of Dr. Chas. J. Hatfield for three and one-half years.

While at White Haven, the patient performed some light duties, among which was, taking care of the case-histories for the daily examinations. In pursuance of these duties, she saw her own record and noticed that her condition was marked

"third stage." This occurred nearly three years before she became a patient of mine.

The following charts (Figs. 1, 2), and notes were made at the first examination by me:

The patient exhibited surprisingly few rales and rubs. The sputum examination proved negative on June 17, 1912, and it remained so. Pulse, 112; respiration, 24; temperature, 99.2 degrees F. Great difficulty was experienced with the fever and it did not become normal until November 7, 1912. There were tuberculous ulcers both on the anterior pillars of the fauces and on the right posterior pillar. A blood count was taken April 24, 1912, which gave: hemoglobin, 80 percent (Tallqvist); red blood-corpuscles, 5,360,000; white blood-corpuscles, 15,096; specific gravity, 1.057; color-index, .79. Microscopically, the corpuscles were normal.

The patient's weight increased to 111 pounds, and, in the following way: The abdominal girth diminished, while the chest filled up and broadened, thus greatly re-

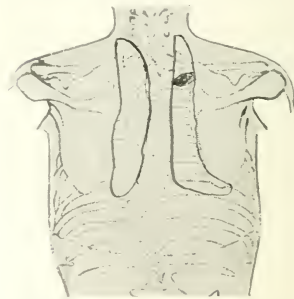


Fig. 2.—Case 1. Partially healed cavities. Back.

ducing the prominence of the skeletal landmarks. The adhesions so familiar in cases of fibroid healing gradually disappeared under the steady influence of the medication and the respiratory ratio steadily became more normal.

The patient was not systematically sterilized with mercury. The attempts that were made not having proved successful—largely because of inexperience. An examination made March 13, 1914, revealed a small patch of fibroid healing at the apex of the

right lung and one on the left lung over the old cavity.

This patient has married since then and does not now live in Philadelphia; however, I receive news about her occasionally. "She is fairly well. She has her good days and her bad ones, but, on the whole, is happy and active." This is certainly a most unusual example of a patient rescued at the latest hour.

Case 2, taken from files for May 15, 1913, and not previously reported. Female, white, aged 24 years; nativity, New York; occupation, clerk. Family history: Father died, at the age of 27 years, from heart disease. Mother living at the age of 49 years; is an invalid, a neurasthenic. One brother is living at the age of 27 years, an invalid. Another brother died at the age of 28 years, of Bright's disease.

The patient's highest weight has been 154 pounds, in 1905; her lowest weight was 118 pounds, in January, 1913; her present weight is 131 1-2 pounds. She complains of cough, expectoration, taking cold easily, and which is persistent; tired and "draggy" feeling, loss of weight, and, capricious appetite. Her tongue shows red spots (enlarged papillae). There is eructation of gas, nervousness, irritability, active perspiration when excited, constipation. The eyes were of a pearly tint. Expiration was prolonged, inspiration shortened. The area of involvement, anteriorly, extended to the third rib both on the right and the left side, posteriorly to the third right rib. On the left, there was a patch at the apex and one extending from the fourth to the eighth rib. The left lung was not nearly so deeply involved and it became normal early in the treatment. The pulse was 108 and was short and weak, but, steadily improved under treatment. Respiration was 21. There were two small ulcers on the right posterior pillar of the fauces. The papillae of the tongue occasionally were enlarged.

Following the rule of this office at that time, the patient was required to obtain two confirmations of the diagnosis of tuberculosis before treatment could proceed; consequently she was examined at the public dispensary and was admitted to Mount Alto. In addition, I hold the written confirmation of the diagnosis of tuberculosis by Dr. Jos. Walsh, made in the course of routine office practice. When

cured, the same procedure was observed; and there were two confirmations of that result. It may be added that one of the physicians volunteered the opinion two months before she ceased coming to this office, that the woman never had had tuberculosis.

Case 3. Taken from the January 15, 1913, files, and not previously reported. Male, white, aged 27 years; married; nativity, Ireland; occupation, private secretary. Complaints of night sweats, cough, catching colds, gritting of teeth, pain in chest, especially when working over the desk, tired and "draggy" feeling, loss of weight, wandering of mind, difficulty in self-control (easily moved to tears), irritability, sleeplessness, indigestion, anorexia, constipation; also dislike of crowds and of great depression at times. Family history: Father died at the age of 67 years; cause unknown. Mother is living and well at the age of 50 years. Three brothers, aged 21, 19, and 16 years, respectively, are living and well.

The patient's greatest weight has been 165 pounds; his present weight is 159 pounds. Pulse, 84; respiration, 32; temperature, 36.8 degrees C. The right lung was involved anteriorly to the fifth rib and nearly to the anterior axillary fold; posteriorly, to the fourth rib. The left lung was involved anteriorly to the second rib; posteriorly, to the lower angle of the scapula.

Two days following the first examination, on January 17, 1913, the patient was examined at, and admitted to, the Mount Alto Sanatorium. I hold the postal card notifying him of his acceptance by that institution; also the subsequent correspondence. They confirmed the cure and vigorously offered, by one of their minor officials, to list him as one cured. He never entered Mount Alto Sanatorium, nor took any treatment other than mine.

The Antisyphilitic Treatment of Tuberculosis

My method of treatment is as follows: Calcium sulphide and sodium sulphocarbonate are always prescribed together. The sulphocarbonate keeps the mucous membrane of the stomach normal and so aids greatly in the absorption of the somewhat disturbing calcium sulphide. Calcium sulphide is given in 1-2-grain hourly doses (three 1-6 grain pellets). Tablets of cal-

gium sulphide should not be used. These pellets should be taken without water. The 5-grain sodium sulphocarbolate tablet should follow the calcium sulphide, being crushed between the incisor teeth and mixed with the saliva for at least three minutes or until the bitter taste of the tablet disappears before it is swallowed. This mixing with saliva is very important, and, if properly done, any-sized dose of the sodium sulphocarbolate can be taken without at any time causing nausea.

The healing of the enteric ulcer is accomplished by the sulphocarbolate. The dose of the latter, taken before meals (three times daily), should be increased from 10 grains up to 75 grains if that is necessary. Ordinarily, I increase the dose each succeeding day by 10 grains per dose; so that, if the dose is 10 grains today, it will be 20 grains tomorrow, 30 grains the third day, and so on, provided other factors permit. Doses of 75 grains will sterilize the small intestine. The stools should be soft and mushy. The colon can not be

sterilized by the carbolate taken by mouth. When the fever falls, the dosage should not be further increased, but, should be continued until the enteric ulcer has healed; which may take one or two months.

In cases of diarrhea, the zinc sulphocarbolate, in enteric capsules (that pass the stomach undissolved) becomes necessary. Above all, the writer advises, in this condition, the intravenous administration of the mercury solution, because this greatly aids the reduction of the fever and also because of the many other beneficial results that invariably follow. There are two points so important as to bear repetition, namely, the proper mixing of the crunched sodium-sulphocarbolate tablet with the saliva, and care to insure mushy stools.

In fine, where there is any chance of curing any victim of tuberculosis, and there is an intelligent appreciation of the principles enunciated in this article, there will be no difficulty in healing first- and second-stage cases of this malady.

What the General Practitioner Can Do in the Treatment of Chronic Diseases

Therapy of Diseases of the Heart

By GEORGE F. BUTLER, M. D.

Medical Director, Modavia, Kramer, Indiana.

(Continued from November issue, page 871)

The Respiratory Tract

HYDROTHORAX and edema of the lungs will be considered further on. Bronchial catarrh, although sometimes demanding direct treatment, is improved by the treatment of chronic myocardial insufficiency. Cardiac asthma must be treated by means of hypodermic injections of morphine, while sometimes digitalin injections are required. Nitroglycerin should be added when there is present cardiac asthma as well as angina pectoris. Since these attacks usually occur in the night, the patient should be careful of his evening meal, eating only the simplest food, and little of that; at the same time, taking a large dose of digitalis five or six hours before the attack may be expected. Then

he should retire early and make his mind as easy as possible.

The Gastrointestinal Tract

The treatment of the myocardial insufficiency usually is sufficient for stomach symptoms also, but the diet may require special adaptation, on account of which constipation may result; and this is a difficult complication in heart disease, for, strong purgation may be followed by acute myocardial insufficiency. While an occasional dose of calomel is beneficial and the stronger mineral waters may be cautiously employed, the safest remedies are rhubarb, senna, podophyllin, and cascara sagrada. In the more severe forms of myocardial insufficiency, those rectal means which require the introduction of large quantities of fluid should be avoided. Castor-oil may be tried, also a teaspoonful of glycerin may

be injected rectally. For diarrhea, the usual treatment is indicated, unless it may be traced to the myocardial insufficiency, in which case digitalis sometimes will afford relief.

Dropsy

In the great majority of chronic myocardial insufficiency, the associated dropsy can be relieved by withdrawal of fluid. The same forms of diet as in pleurisy with effusion should be prescribed. Of course, nothing can be done in the cardiac cachexia, the normal laws of osmosis being overcome here by the state of the tissues resultant upon their malnutrition. The quantity of urine secreted governs the quantity of fluid to be ingested, as a general rule. The milk-cure is useful, but, all indirect measures, such as diet, diaphoretics, diuretics, and cathartics, are applicable only to the milder forms of dropsy, which are relieved by the ordinary treatment of myocardial insufficiency. The more severe forms call for mechanical measures.

Removal of edema is important as a preliminary to the treatment of myocardial insufficiency. This is best accomplished by introducing a sterilized trocar and cannula into the subcutaneous cellular tissue on the posterior aspect of the leg, on both sides of the tendo Achilles, then withdrawing the trocar and attaching to the cannula a rubber tube leading to a vessel beside the bed. Two tubes are introduced into each leg and permitted to remain there for from twenty-four to forty-eight hours, according to results. In this way, the edema of the legs, abdomen, and genitals, the ascites, and frequently the hydrothorax are relieved, as also the myocardial insufficiency.

Headaches sometimes demand special treatment, when they will not respond to ordinary methods, and in such cases caffeine preparations are useful, as well as anti-pyrin and guarana (in the form of the elixir). For the insomnia, milder hypnotics are appropriate. Irritability, depression, and hypochondriasis are matters for psychological treatment. The severer psychoses commonly developing in the second stage of myocardial insufficiency are to be treated in institutions whenever possible, and these subjects always to be kept under close observation, for, attempts at suicide may be made. In their case, forcible feeding may become necessary. In all forms, whether severe or mild, rest in bed is of the highest

importance. During convalescence, there should be no exercising, not even walking, for two hours after eating.

The Heart in Obesity

The first indication here is for the reduction of the obesity, which, though, will be accompanied with danger to the heart, particularly in patients of middle age or over. When there is a vascular lesion or arteriosclerosis, any remedy should be used with extreme caution. As physical examination of the heart is so often misleading as to the condition of the myocardium, other symptoms of myocardial insufficiency must be considered, especially those of venous stasis, even though these may be due to the accumulation of fat in other portions of the body, and, therefore, unreliable as a guide. As a rule, anemic subjects, extremely obese people, and persons over sixty years of age who are fat may be considered to have myocardial disorder.

When in very obese patients there is a flabby and acutely insufficient heart, the diet should be arranged in a way to furnish enough calories for the weight of the subject; however, there should be no depletion, albumins being the main reliance, though fats and carbohydrates may be used sparingly. The fluids should be withdrawn gradually.

In second-degree myocardial insufficiency, passive gymnastics should be employed as soon as improvement begins, to be followed by active methods; and these, as a rule, must be persisted in for a long time, it being useless to expect quick results. The diet should be calculated to take off the weight very gradually; a fact that should be impressed upon the sufferer, who usually is impatient in this respect, not comprehending the danger attending too quick a reduction. As a rule, he should be under observation from one to two years, according to conditions.

Heart Force and Rest

In prolonged convalescence from acute disease or after surgical operations, and the like, we often find a diminution of heart force, owing to the extended rest afforded the body—and there is danger of acute myocardial failure. Upon the appearance of any evidences of this condition, the patient should be treated as during recovery from acute myocardial insufficiency. The employment of mechanical therapy here is essential,

while strychnine and strophanthus are of value.

The Heart in Arteriosclerosis

Myocardial insufficiency is produced by arteriosclerosis through the effects on the coronary arteries, the endocardium, the myocardium, and as the result of disease of the peripheral blood-vessels, and in these conditions the arteriosclerosis should receive treatment. The effect upon the heart, owing to increased peripheral resistance, may be successfully met with nitroglycerin. In coronary sclerosis, the treatment is that of angina pectoris, of bradycardia, added to that of myocardial insufficiency, and, if

there are valvular lesions in the endocardium, these also must receive attention. It will frequently happen that the splanchnic area is affected, and then the bowels must be kept freely open, even if it should become necessary to resort to hydragog cathartics; the latter, though, never to be used even in such an emergency if there is much weakness. Calomel, senna or mineral waters ordinarily are sufficient. After the symptoms of severe myocardial insufficiency have disappeared, the treatment dietetic, medicinal, and mechanical must be regulated with regard both to the arteriosclerosis and the chronic myocardial insufficiency.

[To be continued.]

Vagotonia: A War Disease

By C. VON DZIEMBOWSKI SEN., M. D.

Staff Surgeon, Military Hospital at Posen, Germany.

(Continued from November issue, page 811)

The Rational Treatment of Vagotonic Disorders

BUT little remains to be said concerning the differentiation between vagotonic and the other nervous diseases. As already remarked, vagotonic is an independent disease; however, it can frequently be complicated by hysteria and similar disorder. When uncomplicated, it differs from hysteria, in that the psychic lesion, the "health-conscience," always a factor of hysteria, here is entirely absent.

As to the treatment of this disease, it must accomplish two objects; namely, it must combat the hypertonicity of the pneumogastric nerve, and, secondly, it must be causal and general. The first condition we fulfill by administering atropine, which, as already mentioned, powerfully depresses the vagus nerve. The dosage and mode of use are determined by the symptomatology. If the disease-attacks occur periodically, then we give the alkaloid hypodermically; but, for a while continue it in small doses by mouth, in order to prevent a relapse. If, however, the condition is more of a chronic nature, then

it is best to prescribe fractional doses taken internally. As a rule, though, the doses must not be too small if a real effect is to be attained.

Not alone my personal experience and that of our hospital staff prove the action of atropine in vagotonia mostly to be very striking, but, abundant proof of this also is found in the literature. True, the effect is not always so marked in inveterate cases (particularly so in bronchial asthma); the reason for that, though, is, that the repetition of the attacks already has given rise to secondary anatomical lesions in the affected organs and which perhaps are irreparable. Since, thus, vagotonia is amenable to a specific therapy, the importance of its recognition is apparent.

Of late, attempts have been made to overcome the hypertonicity of the vagus by augmenting the tonus of its antagonistic nervous systems, that of the sympathetic, and for this purpose adrenalin and pituitary solution have been experimented with. As a matter of fact, these tests have been crowned with success, in certain directions, mainly, however, in the case of bronchial asthma. It is on this basis that the good effects of the preparation known as asthmolysin rests, which is a combination of adrenalin and pituitrin. This beneficial action of the adrenalin suggests the presumption that the nature of bronchial

*Address delivered before the Society of Military Surgeons of Posen, as printed in *Die Therapie der Gegenwart* for November, 1915. Free translation and adaptation by Adolf G. Vogeler, Chicago, Illinois.

asthma consists in anplasia (absence of tissue) of the chromaffin tissue (with which the generation of adrenalin is associated) and by virtue of which there obtains in the system a *hypotonia* of the sympathetic nerve, and the latter, thus, is incapable of keeping the vagus in check—whereafter the excess activity of the latter gives rise to the pathologic phenomena; that is, the *vagotonia*.

Now, in order to meet the second therapeutic indication, we must aim to allay the irritability of the vegetative nervous system, and for this we may prescribe bromine preparations and valerian. In addition, baths and cold-water treatment are popular and effective. Above all, however, a milk and vegetable diet is of importance; the reason being that there is a strong presumption that certain cases of this disease represent an anaphylactic reaction produced by catabolistic products of albumin. Hence, even cured patients should have their diet guarded for many months, so as to obviate relapse. Exceedingly important, also, is the suggestive influence of the physician, who must exercise tact, be kind, but, yet, firm, and clearly explain to the victim the exact nature of his malady, but not scare him with any anatomical diagnosis, lest he convert him into a hypochondriac. Lastly, the will-power of the patient must carefully be aroused and educated, thus training the resistance of the nerves. What an iron will can accomplish, the present war has amply demonstrated. Occasionally it is best to send a chronic subject to a good sanitarium.

In conclusion, a few words as to why this subject concerns military medicine. As a matter of fact, *vagotonia* has been, by us, so frequently encountered in the military

hospitals that I am inclined actually to call it a war-disease. The reason for this, while well understood by psychologists, may here very briefly be explained.

Every human being aims to ward off disagreeable sensations. Thus, children of nervous temperament often learn to avoid chastisement for misbehavior by pretending to be sick. If this action is frequently repeated, a fixed association of ideas is built up, in the child's mind, between warding off displeasure and being sick. The result is, that, in later life, when such a feeling of displeasure is aroused by terrible impressions that rush in upon him, when superhuman exertions and supreme mental and bodily strain are demanded of him, too much for the psyche to bear up against, then this individual entirely automatically and by an associative process will try, exactly as in his childhood days, to get rid of this feeling of displeasure. No longer the educationally instilled ethical sentiments bear him up, the sense of displeasure becomes overpowering, and a mood sets in in which the slightest somatic disturbance suffices to awaken the feeling of being sick. And that is the basis for the *vagotonia* developed in participants of the war. Never before nervously sick, a soldier, when grasped by this mood of displeasure, becomes sick under the influence of some somatic disturbance; not, though, hysteric or neurasthenic, but, as I have said, *vagotonic*.

Remembering what has here been laid down—the symptomatology, the differential diagnosis, the physiology and pathology, and the specific therapy—the intelligent military physician should be the fortunate agent to give many an ailing soldier back to his arduous duties.

Camp McClellan Notes

By A. L. NOURSE, M. D., Camp McClellan, Alabama

THIS war-business has been fraught with some strenuosity, not alone for those who form, or will form, combative units, but, for the citizens who are making preparation for the care and effective training of these units.

Near Anniston, Alabama, there was, until recently, a mountain-surrounded valley punctuated with ancestral homes, corn-fields, cotton-patches, and wooded areas

where camped Br'er Possum. In a few short weeks, the landscape has been changed. The eternal hills remain, forming backgrounds for artillery practice-ranges; all the other features, though, have been converted into rows upon rows of mess-halls, administration-buildings, hospitals, and other structures essential to a permanent military camp, among which the big base hospital is the most conspicuous

of all. All this involved, of course, the employment of thousands of men, men recruited from the four cardinal and all intermediary points of the compass, men of diverse physical idiosyncrasies and habits of diet and of living.

It has been the writer's assignment in the scheme of things to look after the physical care of this citizen army, making preparation for that of some 45,000 men.

Now, if one desires to be busy, let him take himself to a camp of some hundreds of men, begin operations under the trees while caring for the minors and sending the majors to a hospital assigned as a base (in this instance, St. Luke's, at Anniston), plan an emergency-hospital, watch it grow up like a mushroom almost in a night and a day, then move in and care for the heterogeneous crowd in various needs thereof, these ranging from the imaginary requirement of a dose of pills, predicated upon the idea that it would be sinful not to demand them when furnished gratis, to the more real necessity of treatment for a broken limb or an abused stomach.

Even with the fortunate absence of epidemic or endemic diseases enjoyed at Camp McClellan, there will be plenty to do in exercising vigilant guard against these and treating the sick and injured of a physically unexamined citizen army, in the very nature of things largely untrained to the work in hand. Change of diet, ingesting food in a hurry, and stress of altered environment will make for temporary and acute illness, and sudden assumption of the tools and dignity of the carpenter's profession on the part of those previously engaged in the equally useful employment of raising agricultural products, instead of mess-halls, will make for trauma.

About Diet and Ill Health

After all, here, as elsewhere, the greatest single source of disease is autotoxemia, resultant upon excessive food intake and deficient elimination; this with the load thrown upon the system in an effort to maintain metabolic balance and resultant energy waste. Especially do those with latent and partly compensated defect suffer from such a condition of intestinal folly. To be convinced of the truth of this our reiterated statement, take the urine of the first twenty patients coming into one's office and make the simple hydrochloric acid-chloroform-iron test for the blue ring

of indican and see in how many there can be no hope for a real cure without making a radical dietary correction. This, together with stimulation of the liver and digestive-tract secretions, followed up by that laxative-saline washout as a preliminary measure, together with establishment of "intestinal antiseptics"; more correctly, floral balance.

This writer decidedly joins the chorus of voices crying that the American people eat too much and of food too illy selected. This, without voicing his personal predilection for a purely vegetable diet.

Looking over the manuscript of this article, Dr. R. L. Hughes, of Anniston, chief surgeon for the Jno. O. Chisolm Company, who are doing this construction work, makes such strenuous comment upon dietetics, especially in connection with the use by our southern people of the fat of the hog, that the writer is constrained to interject some of his friend's remarks—the whole of which would take up the entire space of this article. The Doctor says that nine-tenths of the people of this section are afflicted with some form of indigestion, and that the other tenth will be unless they get over a predilection for food fried in the porcine hydrocarbon. My commentator is responsible for the statement that many of our people are so in favor of pork fat that, in order to get them to use the more rational home-produced cottonseed-oil as a frying-agent, it will be necessary to make them ship their swine to a northern manufacturer and then to bring it back in the form of some compound supposed, at least by custom, to be lard.

What to eat and how to eat it certainly must become a study with the people of this country. This would mean fewer doctors, but, it is along the lines advocated by the one profession on earth that is willing to be put out of existence through education of its clientèle.

Man must learn that he eats to live, and not, that he lives to eat. Altogether too many of the race regard their existence between meals—and lunches—and efforts at species propagation as more or less an irksome and undesirable necessity.

In Our Camp-Practice

Now to return to things in our camp. When a patient is brought into the hospital down with "cholera morbus" or other form of cramps, a 1 200-grain lobeline-

sulphate solution is immediately prepared, one-half of which is injected right away and the rest in ten minutes. A third dose seldom is required. This, unless conditions are such as to demand immediate evacuation of the stomach, in which case, both emesis and relaxation are secured by means of apomorphine. It always is well to remember that emesis is valueless after the stomach contents of an undesirable nature have passed the pylorus, while not forgetting, though, the possibility of their remaining there far beyond the usual limits. The long small intestine extending from the pylorus to the colon calls for patience and judgment in the emptying-process.

Checking pain by giving morphine is to be avoided in intestinal disorders, lest in that way we stop peristalsis when it is undesirable to do so. If morphine absolutely must be resorted to, then employ the hyoscine-morphine combination; however, a dose or two of lobeline will usually produce a temporary relaxation and thus afford relief astonishing to one not acquainted with its action.

Lobeline is a wonderful drug, with an amazing range of possibility of employment. The writer takes it that the use of lobeline in the toxemia of pregnancy—the dreaded eclampsia—is now beyond questioning; indeed, that perhaps is where it most excels, because there we long have needed it. However, among its other applications, is that in sunstroke. Here we get the circulation to the periphery with glonoin, following with atropine, and then with lobeline.

Further study will, doubtless, reveal the fact of a power of lobeline to aid nature in the neutralizing of the toxins engendered by local congestions of short duration. In no other way can the efficacy of this alkaloid be explained. The writer foresees the time when lobeline will supplant morphine in more than one-half of cases where now the latter drug is being used. It is up to every one wishing to increase his power over disease to study the active principle of lobelia. The crude drug has some marked limitations; those of the active principle have not as yet been determined. Another ipecac-emetine proposition!

Experiences with Dakin's Solution

Dakin's solution (here better known as solution of chlorazene) is a great favorite,

owing to its ease of preparation and particularly to the stimulation of cell proliferation by its toluene molecule. Really, when properly employed, whether in the form of irrigation or of frequently changed moist dressings, this preparation will act so successfully upon denuded surfaces that one is likely almost to conclude that skin grafting has lost its place in treating extensive excoriated and infected areas. The surgeon who cleans all lacerated or perforating injuries as well as circumstances permit and then properly uses Dakin's solution will never use anything else—not, until, perchance, modern chemistry produces something better. At the Chisolm Hospital, Camp McClellan, and at St. Luke's, at Anniston, chlorazene is a high card at present.

The Therapeutic Value of Magnesium Sulphate

Again we are in a position to realize the value of sulphate of magnesium, used externally as well as internally. The multitude of minor bruises, with consequent exudations, occurring are liberally dressed with a strong solution of this salt. Often a patient received early in the day will be relieved promptly by its continued application, followed by fixation and pressure at night. The bad sprains, with swelling, are well treated with the continued contact of the solution, hot, followed by fixation, the same as if there were a fracture. Especially is this true of wrist sprains, those that almost make one think of a Colle's fracture when not seen until several hours have elapsed—the kind that make one hunt for crepitation, though patient examination elicits normal movements of pronation, supination, flexion, and extension. Of course, the internal administration of "the dose of salts", preferably its more elegant effervescent modifications, is here, as everywhere, of first importance, as a simple saline laxative, as well as a cholagog "followup," and quinine adjuvant; here being used as a saturate aromatized solution, in which the quinine is dissolved by means of sulphuric acid, and taken with plenty of water.

Asked for an appropriate name for the emergency-hospital, the writer suggested that it be called the $MgSO_4$ Hospital; but, a professional friend objected, on the ground that the Lobeline Sulphate Institute would be more appropriate. However,

in all probability this little institution will go down in history as the John O. Chisolm Company Emergency Hospital, Camp McClellan, Alabama. It will pass into the memory of its resident surgeon as the location of perhaps the most strenuous period of his professional life; but, withal a place where he met many most pleasant people from every walk of life and where the casual meeting developed into what he thinks will be some of his few enduring friendships, both lay and professional. Also, modesty not being a possessed or desired attribute, he will be forced to congratulate himself upon having been able to handle satisfactorily a rather novel situation and certainly one not altogether lacking in responsibility and complexity.

Foot-Punctures by Nails

The soil round-about here not being deemed tetanus-infected, the use of tetanus-antitoxin was not instituted at Camp McClellan, although symptoms were closely looked for, with the determination to resort immediately to this agent, and to lobeline as an adjunct, should any suspicious manifestations occur. With an unusually large number of foot-punctures by nails happening, a negligible percentage of these lesions have called for other than first-aid treatment. All wounds requiring it are enlarged and injected with tincture of iodine, with an urethral syringe. In the few necessitating other and subsequent treatment, the carbolic-acid and camphor mixture has given excellent results, wounds already infected receiving a free application of pure phenol, washed off with alcohol, in order to protect the tissues not involved. In the treatment of wounds with pure phenol, it is worth remembering that eucragoric makes a splendid substitute for alcohol, carrying, as it does, 46 percent thereof. This treatment has been successful in the minor cases; those injuries involving more extended solution of the continuity of tissue have, as before stated, been treated with chlorazene, as an antiseptic and granulation stimulator.

Malaria Not Prevalent

Comparatively little malaria has been met with here, and routine treatment only is being given; always with observation of the rule to maintain the quinine effect by giving the quinine *during the night*. Not to do this, may be considered as one of the commonest of errors in the treatment of

this disease. Most of our cases have been resultant upon imported latent infection and of the tertian type. One case occurred in which there was marked quinine-idiosyncrasy and where distressing urticaria followed the first dose of Fowler's solution and *eupatoria perfoliata*.

Toxicodendron-Poisoning

A more or less successful effort was made to teach the workers to immunize themselves against the virus of poison-oak by eating the young leaves, and no cases were reported in those who had followed this prophylactic measure. Bathing with bicarbonate of sodium solution and applications of spirit of nitrous ether following was the most successful treatment generally followed in developed cases. Tincture of iodine and alcohol, equal parts, also gave results.

Sublingual Medication

In camp practice, the value of the sublingual method of taking drugs is emphatically brought forward. It works splendidly in conscious patients. In unconscious ones, the effect of glonoin may be secured from rubbing a glonoin tablet into the lips and available buccal parts, if conditions are not such to permit of immediately giving a sterile hypodermic injection. Any agent not having a pronounced local effect, such as atropine, seems to give surprising results by the sublingual route. The very least that can be said of the under-the-tongue administration is, that it is of the utmost value where sterilization is impossible or mayhap, one's last syringe leaks or the needles are all stopped up while the wires are lost.

That Awful Nostalgia

Before closing this paper, homesickness is worthy of being touched upon. It is quite probable that intestinal disease and nostalgia were really the paramount causes of the great Napoleon's defeat on his Russian campaign—not the winter's rigor. That great soldier himself discovered this to be a factor in the weakening of the strength of his magnificent Swiss regiments, and one of his surgeons (the name now escapes me) called his attention to the fact that the sounding of the Alpine evening cattle-calls was decimating regiments, by engendering homesickness. Wherever men are gathered together, away from their homes, the call of the hearth echoes in their breasts, es-

pecially when sickness or injury enforces idleness. Let no man suppose that the transcendent skill of his surgical fingers or his consummate learning in medicine will accomplish the best results, without diversion of the mind and a bit of affectionate sympathy extended to his patients.

This, love in its broad meaning, can not be given by the casual visitor to the ward who brings flowers and a conventional sick-room smile, although there is no desire to lessen the value of the work of those thus employing a share of their energies. The hospital staff itself must give the atmosphere, the psychological touch.

Keep your wards sunny, rain or shine, and the difference will show when you take temperatures and change dressings in the morning. Doctor, be good to Bill and the rest of the boys in your wards. Sometimes this means a bit of self-sacrifice, but, you will be surprised to find how many trivial nightcalls you thus escape and what value there is in getting the cooperation of your patients.

Eliminate as much as possible the dignity and be human. Let authority sleep, and do not undervalue psychology. Thus you will avoid the hospital horror of a grouch.

In Conclusion

Camp McClellan has been a remarkably healthful camp, being well situated, primarily, and being handled by military and civil authorities that work in phenomenal accord; everyone trying to do his bit. To say that there has been perfection in its handling, would be to lay claim to the supra- or the ultra-natural; but, the quick work done and the results accomplished, with the absence of friction, misunderstanding and conflict of authority at such a minimum would be difficult to conceive of. The spirit of cooperation has been such that "orders from the major" have been no cause for mental anxiety to that immense proportion of the camp's population willing to aid in the work in hand to the extent of their ability. The fact is that our particular major, Major C. L. Dulin, seems to be one of those efficiently suave individuals whose orders are given so gently that they are carried out without any realization that the imperative mood is employed in issuing them. Perhaps the Major knows that his "use your judgment" puts a man of technical training upon the G-string of endeavor to make good in any emergency.

The Financially Successful Physician

The Problem of Collections

By E. E. ELLIOTT, Kansas City, Missouri

Medical Department; Publishers' Adjusting Association, Kansas City, Mo.

EDITORIAL COMMENT.—The business side of the work of physicians has assumed a greater importance than ever before. Under the increased demands made upon physicians in many ways, and because of the greater cost of living, it is necessary, indeed, it is a solemn duty owing to himself, to his family, and to society, that the physician should give up his haphazard business methods and devote proper attention to the securing of an adequate remuneration for his services. Mr. Elliott's article is presented because it contains much of value on this subject.

THE measure of a physician's success lies in his ability to perform effective medical service and to command sufficient compensation therefore to justify the expenditure of time and money to acquire and maintain that ability. Service and compensation are handmaids in medical annals. The one without the other is supreme quackery. The physician who extorts good pay for poor service is no more of a disgrace to the profession than is the one who per-

forms exemplary service without exacting a reasonable fee for such service.

How can a doctor succeed financially? We receive in our office in Kansas City scores of letters from reputable physicians wanting to know how to succeed, who have not yet solved the problem of professional finance. One good doctor writes as follows: "I am known as one of the best doctors in this community. My preparation compares with the best in my entire state.

But, I cannot collect my bills. My patrons ignore my statements. To place the accounts in an attorney's hands, engenders ill will and is otherwise objectionable. I cannot afford to lose the good will of my patrons, neither can I afford to render service without charge. Tell me how I can succeed or what you can do that I can not do?" Here is our reply:

"My dear Doctor: The situation outlined in your letter is one peculiar to the medical fraternity. It ought not to be so, but, unfortunately, it is. In answer to your specific inquiry, I will say that the first essential to financial success for a physician is, capable records of service and charges. I have no doubt you have this sort of record. If not, let me suggest that a number of concerns have such records for sale, and you can ascertain the various systems of records by writing to almost any medical publisher.

The second essential is, the sending of periodical statements of account to debtors. You do not need an elaborate office system or extra help to do this, unless your practice is large, in which event you probably employ help in your office all or part of the time. There should be no failure in sending statements at least quarterly.

The third item for consideration of the successful physician is, professional assistance outside your own office. There are several avenues open in this respect:

The Local Collector.

1. A local collector may be employed. Usually such a person is known as a "collector", and he handles accounts of other physicians and merchants in your community. The local collector often, though not always, is a failure. He will, doubtless, collect some money by "digging" your patrons, calling at pay-day or other opportune times. He often becomes a nuisance and frequently drives the patient away, so that future professional relations are impossible. There is usually no "time limit" on a collector's contract, and bills may remain in his hands indefinitely, without satisfactory returns to you. Hence, I say without reservation that local collectors should be of known ability before being entrusted with bills for service, which represent both money and good will.

2. You may turn your accounts over to a local attorney. The attorney is usually as well known locally as the physi-

cian. Many reputable attorneys will not handle accounts against their friends or maybe their own legal patrons, and most good lawyers are too busy to handle collections, unless the amount is sufficient to justify suit. In that case, costs must be advanced, and law suits are slow, expensive, and otherwise unpleasant. If your accounts can be collected in any other way, avoid both the lawyer and the courts.

3. The third, and the most effective and satisfactory, method is, to employ an experienced, honest, and capable professional adjuster. There are a few such in the United States, whose methods have stood the test of trial on the part of many successful physicians.

The Professional Adjuster.

The methods employed by such an adjusting organization should square with your own ideas of patience, persistence, firmness, and fairness. You should satisfy yourself as to the ability of the organization by investigating its references. Briefly, this is what an adjuster will do with your accounts:

A) They will notify the debtor by mail that they have been employed to audit and adjust your accounts, and they find an unpaid balance charged against the debtor. The letter is courteous and not too brief. It is mailed in an envelope which does not suggest its source. The letterhead itself does not smack of a collecting agency.

B) If a reply comes, with or without remittance, it is handled further by courteous personal correspondence.

C) If future payment is promised, the adjuster files the account for further handling at the time suggested.

D) If no response comes from the debtor, the adjuster communicates with him again, and he keeps sending on courteous but firm communications until some response is obtained or until the debtor indicates by continued silence that he does not recognize the account.

F) In this last event, the adjuster's attorney may write the debtor a kindly letter of advice, suggesting good reasons for settlement of the account.

F) Suit is a last resort and should never be instituted by an adjuster without specific advice from the physician-creditor.

A responsible adjuster will contract to make regular reports to his clients, at least monthly, with check to cover collections

made, less his commission. When debtors remit direct to the physician, the adjuster should be promptly notified to cease work upon such debtors.

In choosing an adjuster, taboo the "retainer-fee extractors". If an adjuster will not pit his own ability against your accounts, it is safe to assume that he doubts his own ability.

Turn over to the adjuster only accounts you can swear are correct. Do not expect him to collect from people of unknown address nor from indigents or insane persons. The statute of limitation ought not to run out before accounts are placed with the

adjuster. In other words, turn over such accounts as you would be willing to push locally; then stand back of the adjuster by giving him your moral support.

The results to be obtained will consist of money, good will, and retained patronage. Your debtors will respect you more if their obligation is discharged. They will feel free to call you in case a physician's services are required. You will be more prosperous because of having money instead of unpaid bills. Patrons will need no longer avoid you. You will earn for yourself a merited recognition as a successful physician."

Cardiac Cough in Mitral Disease^{*}

By AUGUSTE BLIND, M. D., Surgeon in the French Army,
and RAOUL RICARD

ONE of the last lectures which our teacher Prof. H. Huchard delivered in his clinic on diseases of the heart was on the subject, "The Cough of the Cardiac Patient." This talk did not deal with cough like, for instance, that caused by a simple catarrhal bronchitis in a patient with compensated mitral insufficiency, but, rather, with the cough that is peculiar to the lesion of the heart, or, more correctly, to a noncompensation in arterial or valvular heart disease.

There is a peculiar cough that is incessant, paroxysmal, like whooping-cough, often unproductive, especially at first. It is extremely fatiguing. It occurs particularly at night, although there may be attacks in daytime. This cough does not yield to expectorants, such as antimonials, nor to decongestives, such as ipecac, polygala, emetine, neither to soothing medicines, such as opiates and belladonna; it is made worse by sodium benzoate, and it is not favorably influenced by cupping, which in a particular case will act by relieving the right heart, rather than by diminishing the pulmonary congestion. On the other hand, a milk diet, theobromine, and digitalin in sufficient dosage rapidly result in quieting this refractory cough.

According to Huchard, this cough is more frequent in the patient with an arterial

heart lesion than in valvular affections. It is found in the patient who is somewhat obese and plethoric, and it makes its appearance after dietetic errors or after physical fatigue. It is associated with renal insufficiency and may be habitual, but is temporarily exaggerated.

This cough occurs in patients of fifty years or older. However, it may also be found in the younger patients with valvular heart disease. It may appear before dyspnea, before the tachycardia, and before the arrhythmia, as the first symptom of an attack of asystole. It is more frequent in mitral valvulitis, particularly of rheumatic origin, than in aortic lesions. It appears in recent endocarditis rather than in that of longer standing, as though the hypertrophy of the myocardium had not yet compensated the circulatory disturbance resulting from the valvular lesion.

The Cause of the Cough

Huchard declared the cause of this cough to be an edema in the central portions of the lung, which may occasionally be recognized by bloodtinged expectoration, and may be present without any auscultatory signs; likewise in the presence of valvular lesions, where cough is induced by one of those rather slight edematous infiltrations which at necropsy are found in all subjects that have succumbed with terminal cardiac asthenia, but which are rarely diagnosed during life. Most frequently such infiltra-

^{*}Translated from the French original in *Paris Médical* for May 26, 1917.

tion is found in the lower lobes, but it may be localized in the middle lobe, the base being simply congested by hypostasis or even free congestion; rarely, it has been found in the upper lobes.

The absence of auscultatory signs or their insignificant character admits no other pathogenic interpretation than edema. There are no moist nor sibilant rales, no modifications of the quality of the sound; on percussion, there is no dullness nor is it possible to discover signs of pleural irritation. Radiography does not disclose anything, the tracheobronchial lymph-nodes are not hypertrophied, the lungs are absolutely transparent. Thus, only the edema remains, although invisible radiographically and radioscopically escaping all clinical investigations.

Unless one is familiar with a patient afflicted with a stubborn cough, one is inclined to think of tuberculosis. However, miliary tuberculosis gives rise to few signs on auscultation; a few small foci of pin-head-size at the time of onset and a slight thickening of the pleura at the apex may exist without physical signs and almost without rise of temperature. The failure of antituberculosis medication does not afford a criterion. Only the rest-cure, equally valuable in heart-cases and in cases of tuberculosis, leads to improvement. Sent to a sanatorium as tuberculous, a patient of this kind will there recover, to the great satisfaction of statisticians.

Cardiac Cough in Soldiers

When the patient is a soldier, the diagnostic difficulties are still greater. In military medicine, only objective symptoms are of value, and physical signs are absent in the cases under consideration. But, how is one to think of the heart in the patient who does not complain of palpitation and who forgets to refer to dyspnea, because he does not attach sufficient importance to it? A man who coughs must have bronchitis, with rales and with fever, but not a heart trouble; that would not be according to the rules. Moreover, the soldier must not have heart trouble, since this, on reexamination, is a cause for invaliding him. In peace-times, the regimental surgeon did not see many cardiac cases in the infirmary nor was he in the habit of establishing a diagnosis in difficult heart-cases. Since the war, matters have changed. Many men with well-compensated heart

lesions have been admitted to the reserve and even to the active service. A good many of them have stood the strain, but others have had symptoms of hypostole. It should be taken into consideration, however, that many medical men are serving in the army who are not accustomed to making chest examinations, having devoted their attention, for years, to special work along other lines.

The Case of Private R.

Under these conditions, it is not surprising that difficult diagnoses are not made and that many soldiers, as the private R., are not recognized as being ill. It must be said that the heredity of this man is a serious one. He has seven children, four of whom died of tuberculosis when five or six years old. The parents are living. He himself has had bronchopneumonia and repeated attacks of bronchitis. He is said even to have had meningitis and his nervous system is very irritable. A course of treatment in the dispensary at Ormesson, when he was almost ten, and three months' treatment later on in Berck, caused him to be classed definitely as tuberculous. Dyspnea brought on by exertion prevented him, ever since childhood, from running, and this might have directed the attention of the physician to the heart; but, when his heart was a little fatigued, the enlightening murmur disappeared. It is a well-known clinical rule—and Huchard has often insisted upon the fact—that a fatigued heart does not contract with sufficient force to produce the pathological murmur which discloses the lesion; rest in bed or cardiotonic medication make it appear by increasing the contractile force of the myocardium.

When R. came into our division, anemic, coughing, with a slight dullness at the right apex and fine rales, with diminished vesicular murmurs at the same place, we also, on first examination, made the diagnosis of pulmonary tuberculosis; for, even careful auscultation of the heart which was dilated to the right border of the sternum, did not disclose any murmur. Further in favor of tuberculosis there was the tachycardia which in reality was due to the emotional liability of the patient and was exaggerated by fear; this, because he was aware of the fact that an unfavorable notice in his hospital records put him under suspicion. He coughed much, without, how-

ever, expectorating. The thermometer did not register higher than 37.3 degrees C., and this did not comport with the assumption of tuberculosis. We were only moderately surprised to find, on examination the next morning, a slight presystolic blowing, which in the course of two or three days developed into a systolic murmur at the apex and continued toward the axilla, and was symptomatic of a mitral lesion. Thus all phenomena are explained: the dyspnea after exertion during childhood, the tendency to repeated bronchitis, the cold extremities (hyposphysia of Martinet), the anemia, the muscular weakness, the low blood pressure.

Under the influence of 1-milligram doses of crystallized digitalin administered for five days, the cough disappeared; likewise the auscultatory phenomena at the right apex; hence, the edematous origin of these pulmonary signs is evident. Moreover, it was demonstrated by radioscopic examination, which now was done and showed: (1) complete transparency of both lungs; (2) very slight enlargement of the right tracheobronchial lymph-nodes which was quite trivial for a city-dweller; (3) an evident dilatation of the heart to the right side.

The Factor of Tuberculosis Infection

If we believe ourselves justified in eliminating tuberculosis as a morbid factor in the cough of private R., it nevertheless can not be denied entirely that it does constitute a pathogenic cause of the heart lesion. If this disease did not affect the patient, it did appear in his children; and

it need no longer be proved that the tuberculous predisposition or heredity frequently gives rise to congenital mitral lesions, particularly to narrowing. With respect to this case, one may recall the beautiful experiments of Professor Landouzy, who succeeded in producing cardiac disease by injecting tubercle-bacilli in a pregnant bitch.

In our patient, the congenital origin of the heart trouble, if not proved, at least is probable. As a child, he could not run with his playmates. In his clinical history, no disease was found that might give rise to trouble, especially in the endocardium, such as rheumatism, scarlatina, pneumonia, typhoid fever. On the other hand, we do not see any reason for assuming a syphilitic heredity, except for the considerable infantile mortality in his family; but, tuberculosis is no less a great killer of infants. Moreover, the patient himself presented no signs of hereditary syphilis.

It is evident, therefore, that:

1. There exists in this patient a cardiac cough that is characteristic of hyposystolia or asystolia.
2. This cough is produced by a localized subacute edema in the lung-tissue.
3. It is curable by means of cardiotonic treatment.
4. It may easily give rise to diagnostic errors and may cause the physician to think of tuberculosis.
5. It appears in patients affected with valvular heart lesions, particularly mitral, as well as with arterial heart lesions.

Diseases of the Rectum and Colon*

By D. V. IRELAND, M. D., Columbus, Ohio

IN order to form an intelligent conception of diseases of the colon and rectum, it will be necessary to review briefly the anatomy of the large intestine, which latter is some five feet in length, largest at its proximal extremity, and is divided into the following parts: The cecum, the ascending colon, the transverse colon, the descending colon, the sigmoid flexure, and the rectum. These will be briefly described in the following.

Anatomy of the Large Intestine

The cecum is the blind starting-point of the large intestine and lies in the right iliac fossa slightly below McBurney's point, and has a worm-like outgrowth below the ileocecal valve, which is known as the vermiform appendix. This little appendage has caused more trouble and has acquired more unenviable notoriety within the last twenty years than the worm from which distills the firewater that causes ordinarily good men to maltreat their wives, and which in turn has brought about woman suffrage in many states, and, only divine Providence

*Read before the American Association for the Study of Spondylotherapy, held at Chicago, October 1 to 3, 1917.

knows what is to happen next on account of these appendages.

One of the maladies to which the cecum is subject is, impaction of the feces, thereby causing a descent of the organ from sheer weight. This dragging down of the organ distorts the ileocecal valve, pulls open the mouth of the appendix and thus admits foreign matter into this little tube. The foreign matter consists, generally, of the fluids, that constantly are being poured into the cecum from the small intestine, and also of bacterial toxins generated in a pathologic cecum. Many are of the opinion that constipation is the prevailing cause of appendicitis; however, I wish to take issue with this view. Constipation and a healthy colon are incompatible. It is the catarrhal condition of the cecum that is responsible for the impaction, and this, in turn, is responsible for the appendicitis. The descent of the loaded cecum, in a woman, causes disturbance of the circulation in the right ovary, the right broad ligament, and the womb, and is responsible for many cases of ovaralgia, ovaritis, leukorrhea, and kindred troubles of that sex.

The *ascending colon* extends upward and a little backward from the cecum to the under surface of the liver, where it bends, rather sharply, to the left, thus forming the hepatic flexure. In case of ptosis of the transverse colon, this angle is made more acute sometimes, even to the point of impeding the passage of the semifluid contents.

The *transverse colon* extends across the abdomen, from right to left, commencing at the hepatic flexure and ending at the splenic flexure on the left. The central portion points downward and forward, giving it a crescentic shape. In the middle portion, the mesentery is long, allowing this portion to sag down; while at the two extremities the mesentery is short, thus holding it well up at the two ends. Considering these anatomical peculiarities, it can readily be understood how a *colocolitis* may arise from an impaction of fecal matter at this point, especially when assisted by tight lacing, which contracts the body laterally and approximates the two fixed points of the transverse colon. Frequently we find the colon so prolapsed as to disturb the integrity of the pelvic organs. It also drags down the liver, the kidneys, and spleen, with all of which it has attach-

ments; and this causes general rot in the whole digestive tract.

The *descending colon* extends from the splenic flexure down to the sigmoid flexure and is subject to the same diseases as is the latter, only in a less degree.

The *sigmoid flexure* is divided by recent anatomists into the iliac colon and the pelvic colon. The iliac colon extends from the iliac crest to the brim of the pelvis; it passes downward into the left iliac fossa to a point just opposite Poupart's ligament, where it turns inward across the psoas muscle and there becomes the pelvic colon, just in front of the inner border of the muscle. Here the pelvic colon forms an S-loop and turns downward, to become the rectum, opposite the third sacral vertebra. It varies much in length, the average being about 16 inches. The loops of the sigmoid curve is freely movable and subject to frequent changes of position. Commonly it lies in the pelvis and, in women, rests upon the uterus, and upon the bladder in the male. This is of special interest, from the standpoint of applied anatomy, since hypertrophied or impacted sigmoid flexure is responsible for so many cases of retroverted and subinvolved womb, leukorrheal and many other troubles to which women, unfortunately, are subject, and for prostatic and bladder troubles in men. Such conditions are all too frequently overlooked and account for many failures to get results in the treatment of the conditions named, when more intelligent efforts might have been crowned with success.

The *function of the colon* is, to absorb the greater portion of the fluid that is poured into it from the small intestine, to finish the process of digestion, and to prepare the refuse for elimination.

The *digestive process in the colon* is carried on by myriads of physiological bacteria, the presence of which is necessary to a state of health. Unfortunately, this area is menaced by other varieties of germ-life, that are toxic and death-dealing from the cradle to the grave. These toxogenic germs may be implanted in the colon from the first napkin that is applied to the newborn babe, provided conditions are favorable. A napkin that is allowed to remain long enough for its contents to ferment (which may occur very quickly in hot weather) is invaded by toxogenic germs, and these find their way upward into the

rectum and colon. Improper foods or foods taken under adverse conditions may set up a process of fermentation in the intestinal tract, and similar results follow. Exposure to cold and inclement weather often causes catarrhal conditions of the mucous lining of the colon, and in this way forms a nidus that invites germ invasion. Thus, one can see that there is no period in life when the colon is not menaced by that army of destroyers that reap a greater toll than do war, pestilence, and famine combined.

The mucous lining of the intestinal tract is subject to all of the diseases that affect the mucous tracts in other parts of the body. The most prevalent of all is catarrh; and the same classification of catarrhal diseases applies here as to those of the nose and throat, namely, the acute and the chronic. The chronic is subdivided into simple, hypertrophic, and atrophic catarrh.

Diseases Affecting Colon and Rectum

Specific diseases also affect the colon, such as tuberculous, dysenteric, syphilitic, gonorrheal, erysipelatous, and diphtheritic. We also find ulceration, secondary membranous and follicular colitis, angulations, prolapse, stricture, and malignant diseases.

A peculiarity of catarrhal colitis, one that we do not find in catarrh of any other structure, is, a separation of the mucous from the muscular coat, this allowing it to slide down and fill up the lumen of the gut with a corrugated and inflamed mass. This separation is due to the destruction of the connective tissue by toxogenic germs that have burrowed through the mucous coat of the colon.

Any one of the foregoing conditions serve to form a culture-bed for the incubation of these germs, the toxins of which create havoc, both locally and constitutionally. Locally, they extend the inflammatory action, excite secretion of ichorous fluid, which, when exuded from the anus, becomes responsible for pruritus, eczema, and other conditions that affect the anal region. A portion of these toxins is, necessarily, reabsorbed and enters the blood stream; and then autointoxication is the result. With conditions like these, it should not be difficult to understand why autointoxication is so prevalent; however, the query is: How does anyone escape?

Autointoxication is simply the primary stage of something worse to follow. During this period, the organs of elimination

work overtime, in an effort to maintain a fair degree of equilibrium, but, sooner or later some organ or tissue must yield to the overload, and then a fixed local disease results. This may be nephritis, rheumatism, tuberculosis, eczema, psoriasis or any of the numerous local conditions that have their origin in colonic infection.

Pathologists have sought to trace the source of these infections to the tonsils, the teeth, the ears, and everywhere but to the colon, which latter stands as the most frequent source of autotoxemia. Perhaps 90 percent of those who enter our consulting-room suffer from constipation. The patient seldom refers to this fact, because he knows the doctor will order a physic, and he can take that just as well without the doctor's advice. When the doctor attempts to treat the condition, he treats it as an idiopathic disease; and the treatment usually results in failure, because he is trying to remove a symptom, instead of the disease.

Constipation is the result of some one of the multiplicity of diseases that affect the colon and the rectum, often concurrently. I have never examined a case of chronic constipation and failed to find existing diseased colon. As I said before, constipation and a healthy colon are incompatible. Since treating diseases of the colon, I never fail to relieve the constipation.

Wherein Doctors Have Erred

Any conscientious physician who will direct his attention to this line of work will not fail to be rewarded pecuniarily as he has never been before, but, also, he will lay up a store of human gratitude that will prove a source of everlasting pleasure. Myriads have applied to our profession, seeking relief. They have cried out, in their agony, for help, and we have heeded them not, because, forsooth, of a rotten system of ethics, combined with a species of prudery and false modesty that will long remain as a stench in the nostrils of the world.

I can well remember when the man who dared to treat rectal diseases was dubbed a quack and was ostracized by the profession of which we constitute a part. It took men of strong personality and high professional standing to blaze the trail, so that others might safely follow.

Today, we are curing cases by this new method of treatment that were considered

incurable last year, and another year will add many more to the list.

Some Gratifying Clinical Results

Last summer, a woman came for treatment from a nearby town. She is twenty-nine years of age, was married at eighteen, and has a daughter eleven years old. Strange, how rapidly some things develop when planted in good soil. She is now the mother of four. Since her first confinement, she has suffered from a retroversion, with subinvolution. Eight years ago, she was under my care, and was benefited, but, not cured. She became pregnant soon after with her third child, and her confinement left her in worse condition than before. She has received various treatments of the conventional type more or less constantly ever since, but, without appreciable benefit.

Examination disclosed the uterine fundus resting back in the hollow of the sacrum, the uterus $3\frac{1}{2}$ inches in depth. There was endocervicitis. Recently, I had entertained the thought that much of the pelvic trouble in women is due to the pressure of a hypertrophied or impacted sigmoid flexure resting upon the uterus. I found a chronic proctosigmoiditis, with hyperplasia of the sigmoid flexure. The walls of the latter were much thickened and had the characteristic sausage appearance.

I applied a treatment through the sigmoidoscope, using krameria locally. I used the slow sinusoidal current, in order to stimulate the uterine supports, and packed the uterus up into position. Treatments were given twice a week. When she returned for her fifth treatment, I found the uterus in full normal position and reduced to nearly its normal size. She was dismissed as cured after eight treatments. The heavy sigmoid gut, by pressing upon the uterus and the left broad ligament, had constantly interfered with the return flow of blood and thus had all these years kept up the condition described.

I have not had sufficient experience along this line to venture an opinion as to the percentage of pelvic troubles in women that are due to a disease of the sigmoid flexure and rectum, still, I am sure that it is quite large.

An old friend of mine, from a former field of practice, called upon me in July last. As he entered the office, I was shocked at the change in his personal appearance since I saw him last, some two years previ-

ous. He is 63 years of age, has always been a very fine specimen of physical manhood; now, he was stooped and thin, his color an ashen gray, the luster had gone from his eyes and the elasticity from his step. He spent last winter in Florida, and, while there, he was attacked by a peculiar type of vertigo. If, when lying down, he turned to his right side, the vertigo would strike him with the suddenness of a rifle-shot. His face would blanch, his eyes converge, and tremble as in a clonic spasm; his face expressed extreme anxiety. I do not know what the result might have been had he not turned quickly upon his back. If he attempted to stoop and pick up anything with his right hand, he would fall.

He had consulted an Ohio physician of rather considerable repute, who was also sojourning in Florida. This doctor found the blood pressure around 200 mm., and he pronounced it a case of arteriosclerosis with unfavorable prognosis. Under medication and a rigid diet, his blood pressure had been reduced to 180, but, here it stubbornly remained. The vertigo attacks came on as before.

Examination at my hands revealed a severe chronic proctosigmoiditis, with much thickening of the walls; also a very large and sensitive prostate gland. I treated him three times per week for a month, then twice a week for another month, using krameria locally through the sigmoidoscope; I also massaged the prostate gland at each treatment. I also applied concussion at the tenth dorsal spine, to dilate the blood-vessels and to relieve the tension. In one month, his blood pressure was reduced to 130 mm., while all other symptoms had greatly diminished. At the expiration of the second month, the man was dismissed as cured.

In my opinion, much of this scare about high blood pressure is based upon a myth. Generally this condition is produced by autointoxication, and the source of the intoxication is the colon. I have treated cases where the blood pressure was as high as 220 mm., the urine loaded with albumin, and granular and hyaline casts, that gave way to the treatment just as promptly as we saw in the case reported.

In these cases of high blood pressure in men, don't forget to examine the colon and prostate gland. When you find an en-

larged prostate gland, do not become excited and send for a surgeon. If I can ever be forgiven for having advised operation in cases of this kind, I shall never sin again in the same way. Get busy with your sigmoidoscope, with massage, and the slow sinusoidal current, placing a prostatic electrode in the rectum opposite the prostate gland and the other at the 12th thoracic spine. Use the current strong enough to produce perceptible contractions. The patients whom you fail to

relieve or cure do not stand much show in the hands of the surgeon.

The same may be said of hemorrhoids. Treat the proctosigmoiditis, that impedes the return flow of blood through the hemorrhoidal veins, and you will be surprised to see how rapidly the hemorrhoids will shrink up and disappear. It is my opinion that the treatment of hemorrhoids with the injection-method, ligature, cautery, and the knife will soon become a thing of the past; fortunately for those afflicted.

War Fatigue

By B. SHERWOOD-DUNN, M. D., Paris, France

Membre Correspondant, Société Obstétrique et Gynécologique de Paris; Surgeon (Colonel), Service de Santé Militaire de Paris; Physician to Cochin Hospital.

THE surgeon of the front-line hospital sees, from time to time, cases of extreme fatigue, and these at all times presenting themselves in curiously marked forms and sometimes manifested in a startling way. The doctor sees passing before him, at his quotidian visit, men easily worn out, the castoffs; for, many men called to service are mentally unfitted for war, as, for instance, the music-teacher, the ladies' secretary, as well as every kind of *dilettantes* who all their lives have lived in sheltered places, unaccustomed to any serious physical effort. Many of these men quickly go to pieces and to the hospital. However, it is not of this kind that I would speak—I am thinking of the strong man, mentally and physically, who by the force of his will stands up to the strain, will not concede that he is taxed beyond his endurance, living for days with his nerves taut as fiddlestrings until all at once he breaks and is "all in."

War-fatigue in its simplest form is manifested by lumbago. The victim complains of pains in his back and loins, and rachialgia, while forward flexion of the trunk at the dorsolumbar articulation is accomplished with difficulty, there are muscular pains in the thighs and legs, the face has a slightly drawn expression; however, there is no fever, and it is only rarely that they complain of headache.

This form is very common among the infantry, who constantly are using a spade, digging trenches, and raising embankments.

A good night's sleep in a good bed, and the next day these men are all right again. Unfortunately, a good bed is not common and the soldier often does not get real repose, and then his lumbar pains persist. This is the complaint of the trench-digger—and all the soldiers sooner or later having to dig trenches, the trouble is met with frequently enough.

If the exciting causes imposed upon the hinges of the human machine are continued, more complex phenomena appear: there arrives a moment when the continued mental resistance to the weight of fatigue no longer suffices to counterbalance its protest by a variable temperature, and, now, the daily record-sheet of the medical inspector and the order for evacuation are marked "febrile movement," without their specifying the nosology.

When, in the face of these signs of protest, the individual persists in performing his arduous duties and holding himself to his tasks by sheer will-power, he suddenly breaks and now presents a clinical aspect often extremely puzzling to the post-surgeon.

The Symptomatology

The onset, usually sudden, is insidious, as a rule. Since it is the good soldier, courageous, devoted, and uncomplaining, who is smitten, the doctor is the more likely to look for a more serious disease as the cause of the condition. The patient complains of pains all over, head, back, legs. Cephalgia, rachialgia, and myalgia, to-

gether with elevation of temperature, are the outstanding symptoms.

The headache almost always is accompanied by vertigo, troubled vision (usually dimness), and roaring in the ears—the signs recalling anemia. The lumbar region is tender and aching. The myalgias vary, but are usual in the thighs and legs, while not infrequently pains are complained of in the joints. The digestive symptoms are marked; for several days the patient has been without appetite, he suffers from nausea and sometimes vomiting, the tongue is coated, the intestinal functions are disturbed and irregular. The temperature ranges from 38° to 39° C.; the pulse is accelerated, fit keeping with the fever; the face is haggard; eyes are sunken; at times there is epistaxis; and sometimes there appears a vesicular eruption upon the lips.

These symptoms endure from twelve to twenty-four hours. The temperature fluctuates, but under the influence of a purge and, possibly, quinine, slowly returns to normal; however, a painful sensation of fatigue persists; which, though, gradually disappears under rest.

It is thus that the patient is seen by the post-surgeon, who by reason of the requirement that a cause for ordering the man to the rear be specified, calls the condition "febrile movement." Many so-called febrile movements under or hide well-defined malarial, and it is left for the surgeon at the base-line hospital to observe and classify the group of symptoms in accordance with the developments. Grip, pneumonia, typhoid fever, paratyphoid fever, pharyngitis, typhus, masked forms of infectious gastric troubles, or some form of enteritis may be suspected from the symptomatology.

This affection can present itself, however, under a different and more troublesome form, the excess of fatigue, nervous and muscular, giving rise to intoxication from faulty elimination of waste, and so causing its development to be prolonged. In spite of the abatement of the fever, the patient retains his condition of fatigue, continues to complain of muscular and lumbar pains and various neuralgias, is without energy, and the anhedonia persists and may manifest itself in gastrointestinal atony and a condition of neurasthenia. There is a slight cough, and auscultation of the chest will disclose that respiration is

less free in the apices; still, in most cases, this is simply a consequence of the state of fatigue and disappears under rest, in conjunction with injections of cacodylate of sodium.

These are the ordinary forms of the manifestation of fatigue, but, there are other forms, startling in their characteristics and oftentimes disquieting to the surgeon.

Sometimes the man is seized abruptly with a pseudosyncopal condition, a brusque refusal of the organism to go on. The man, rigid at his post, is suddenly seized with vertigo, falls almost lifeless, pale as death, and breathing with difficulty. However, under the influence of a stimulant and frictions, followed by rest, he gradually returns to normal. These are the common manifestations of war-fatigue among the troops.

Among the Officers

Among the officers, fatigue acts more directly upon the nervous system, and here we are brought into the presence of a much more disquieting phenomenon. Take, for the purpose of illustration, an officer sent to an advanced post of observation, one which becomes the center of a furious bombardment that continues for the full duration of his assignment, all the while shells bursting close around him. Conscience that any moment may be his last, he must concentrate his full attention upon any and every movement of the enemy within his purview and report these by telephone, as also the performances of the aviators of both sides; also the visible action of batteries, any change in intensity and direction, so far as possible, of their fire; and, besides, he must answer the telephone calls and the signals of aviators passing over his sector. This work in itself requires enormous concentration and closest attention, which alone constitutes a great nervous strain upon the system; add to this the willpower called in action to subdue the nervous tension endured in the presence of the imminent danger momentarily threatening him on every end during his entire assignment, and given a man of a certain hypersensitive nervous organization [vagetonic], and you have here a likely case of nervous exhaustion. And this will manifest itself either suddenly, under a convulsive form resembling an attack of epilepsy, or, later, by a series of

phenomena differing in character and intensity.

His service ended, this officer retires to his quarters, to seek the much-needed and restorative rest; however, relieved from the long-continued strain, he finds that he can not sleep, or else his sleep is troubled, he talks disconnectedly, and exhibits restless movements and gestures, the coordination (both nervous and muscular) is interrupted; in fact, the condition is the manifest evidence of complete nervous exhaustion.

When the doctor arrives, he finds the subject semiconscious, with flushed countenance, eyes brilliant, altogether presenting an appearance of hysteroepilepsy. The convulsive movements are irregular; the respiration, though not stertorous, is labored; the tongue shows no injury nor is there any foaming at the mouth. The temperature may register 39° C., with pulse increased in proportion. However, within a day, these symptoms subside, and after a few days' rest the subject regains his normal poise.

In other cases (and such are not rare), one sees complex psychical manifestations. The premonitions of disaster, the certainty of death in the oncoming action, the "black outlook" of various sorts are, in most instances, simply the result of overfatigue. Hallucinations in a great variety of forms are not uncommon among combatants. It may be a sentinel who, with attention strained, imagines that he sees or hears the enemy first here then there, or of a sudden he thinks he hears the premonitory whistle of the escape of the asphyxiating gas from the trenches of the enemy, and hastily low-

ering his gas-mask hurries to the post in the rear, arrives, with face haggard and suffering from nervous dyspnea. These are cases that arise out of a condition of physical, nervous, and moral fatigue.

In some cases, the subject is apathetic or depressed; he no longer exerts his will and has lost the desire for action.

Among the higher officers, fatigue often manifests itself under the form of an exaggerated ego: the subject ceases to depend upon his subordinates and will try to do everything himself; he seeks to know every trifling thing, tries to oversee everything; he is suspicious that proper respect is not shown to him, complains that his prerogatives are slighted, and exacts at each instant punctilious observance from those about him. Not infrequently, if the condition of fatigue persists, serious mental perturbation supervenes.

All of these pathological manifestations, varying in their gravity, arise from conditions of overwork, mental or physical, or both; the harmonious working of the human machine is disorganized. These conditions of fatigue reduce the individual resistance to a minimum and modify the ability to combat an infectious invasion thus giving free play to the propagation of latent germs in the system.

It is of practical importance to recognize this condition, particularly in commanding officers, not alone that one may restore the proper equilibrium, but to teach the subject the importance of seeking at the proper moment real recuperative rest, to regulate his efforts in accord with his strength, as the truest method by which to give the maximum service to his country.

WHERE you are, is of no moment; but only, what you are doing there.

It is not the place that enables you, but you the place; and this only by doing that which is great and noble.

—Petrarch.

The Ambulatory Treatment of Drug Addicts

By A. S. TUCHLER, M. D., San Francisco, California

IN an article contributed by me to *CLINICAL MEDICINE* for July, 1916, (p. 608), attention was called to a method of treatment for the cure of the morphine-habit, without causing any inconvenience whatever to the addict, the patient going about his usual daily routine of duties with a great deal of comfort, and filled with a sense of optimism, the psychic influence of which will add to the ultimate success of the undertaking.

In the first place, it must never be lost sight of that the physician is treating a patient afflicted with a chronic disease. It will take one who uses one grain a day a much shorter time to be cured of the habit than one who takes a larger amount. When one is deprived of the drug, it is taking away that which is required to keep up the physiological and functional balance of his system. One "should realize that that functional balance and organic and metabolic adequacy in a narcotic-addict are largely under the control of, and vary with, the extent to which that patient is kept in an adequate drug-balance." (*AMER. JOUR. CLIN. MED.*, July, 1916.)

When one is placed in confinement and deprived of his habitual drug, the suffering endured, both physical and mental, is beyond comprehension or belief. The custom is, to look upon such a "fiend," and not as one who is suffering from a chronic disease, and he is lightly given no further thought. It is most cruel and inhuman to deprive one of his narcotic who is accustomed to its use, without giving him something to take its place. It is quite customary in our penal institutions to lock up an addict—if incarcerated for some minor offense—without any further thought as to his need of the drug. He simply is dismissed, sometimes laughingly, but, usually with an exclamation of derision on the part of the attendant.

Drug Needed for Functional Equilibrium

Now, this is wrong. The body requires the drug, in order to sustain the equilibrium of the functional balance, so that one can go about his daily duties in a normal manner. Deprived of the drug, one immediately becomes sick, for the rea-

son named; and, in consequence, there is a pathologic state to deal with. To overcome this diseased state, is, to restore the patient to a normal, healthy condition with the drug to which he is accustomed. So, therefore, when one is deprived of the drug, something must be supplied to take its place, so as not to disturb the functional balance of the body. When, however, this drug deprivation is brought about in a gradual manner, no inconvenience is felt by the patient.

When one is finally cured of the habit, whether by the ambulatory or the sanatorium method, then comes the most critical period and precisely when he requires the most care and consideration. This, then, should be considered the convalescent stage and the patient given the best of care. This stage in the cure of the narcotic-drug habit is the most important one. Many an addict has gone back to the use of the drug just because the treatment of this convalescent stage had been neglected. At this period the patient should receive the most careful treatment, until his system becomes accustomed to the new order of things.

Not everyone can be successfully treated by this method, nor by any other. We have two elements in nature, one is positive, the other is negative. These elements dominate the human being to such an extent as to form one's individuality, or personality. So, the one with the negative element will not exert the will-power necessary to conquer this habit, nor any other. It has been my observation that those who failed with this treatment had that element dominant. Even one possessing the positive nature will find it necessary to exert considerable will-power in order to conquer the habit successfully.

Character Not Changed by Drugs

The general opinion prevails that those who are addicted to the use of drugs have no will-power and are irresponsible. This usually applies, as said above, to those dominated by the negative element. My observation is, that a person, even though habituated to the use of a narcotic, has just as much pride and will-power and

honest intentions and reliability as previous to his contracting the harmful habit. If one did not possess this characteristic of human nature in the first place and before the use of the drug, it would certainly be a missing factor in an addict and would seriously interfere with any cure of this habit.

If an addict is naturally honest, of good intentions, of strong will, and steadfast of purpose before he became such, this drug-habit will not change his nature, but, rather, will assist him in the cure. Those so natured were cured by this method of treatment, followed their respective vocations daily, and gained in weight considerably. In fact, this increase occurs in all while under treatment, and a sense of well-being and hope prevails; whereas before, it was just the opposite.

It may be of interest to mention, with reference to those suffering from pulmonary tuberculosis, that the use of morphine prevents and stops hemorrhage from the lungs and allays pain and cough. Those who are thus afflicted have been given the drug many years ago by their physician, to ease their apparently few remaining days and when the disease seemed hopeless, are still taking the drug and, in consequence, are again able to follow their respective callings. Hemorrhage invariably follows in these cases when the drug is withheld.

The Essentials of Treatment

The treatment, as previously stated, has been somewhat modified. One need not make any changes in the daily routine, only that the diet must be plain and wholesome—no sweets, pies nor pastry. Liquor of every kind must be tabooed, as also tobacco. The excessive use of tea or coffee must also be eliminated. The most important part of the treatment is that of the taking of the medicines, the instruction of which must be carefully followed and the medicines taken with regularity.

As it is necessary to stimulate the liver and bowels, in order to overcome the stagnation caused by the opiate, the following is prescribed:

Calomel	gr. 1-6
Podophyllin	gr. 1-6
Bilein	gr. 1-8
Strychnine arsenate	gr. 1-250

Make into one pill. One to four such pills, as may be necessary, to be taken at

bedtime, and to be followed in the morning by a dose of saline laxative. In some very constipated cases, I find it necessary to give three pills at a dose, after each meal, three times a day, and the saline in the morning. These and the saline are to be taken throughout the entire course of treatment, but, with a gradual reduction to one pill three times a day or less, as the bowels become regulated. However, in the beginning, after this free purgation, for two or three consecutive days, the following anti-addiction tablets (Abbott's) are prescribed:

Xanthoxilin	gr. 1
Atropine valerate.....	gr. 1-250
Cactin	gr. 1-32
Strychnine valerate	gr. 1-128
Nuclein	min. 5

Make into one tablet. One such tablet to be taken every three hours, *day and night*, until dryness of the mouth is experienced, then only every four hours; but, in some cases, one-half tablet will suffice.

Reduce Drug Only Gradually

While these tablets are being taken, the habit-drug must be gradually lessened every two or three days by one-fourth grain. This can easily be accomplished without causing any hardship. When the patient begins to realize this, it will be an incentive to make speedier progress and leave off more than the system can miss and thus disturb the adequate physiological balance. However, disaster will result in consequence and the patient will be discouraged. So, this setback can be avoided by going slowly.

In some cases, I note an extreme weakness when this reduction is well under way, which the tablet will not overcome. So, I find it necessary to give strychnine nitrate, 1-60 grain, with each dose of morphine; this is gradually increased to 1-30 grain with each dose, two or three times a day. It is astonishing, how much strychnine one will tolerate during the course of this treatment without producing any symptoms of saturation.

In patients of a nervous temperament, there is thus that factor also to content with, and then the following will quiet and soothe and promote rest and sleep:

Specific medicine of avena.....	ozs. 2
Specific medicine of hyoscyamus.....	oz. 1

Take of this 20 drops in a cup of hot water at bedtime. This may be repeated

during the night as long as it is found necessary.

The psychic influence of the physician, and his encouragement, is no mean factor in getting results, and, when the direc-

tions outlined above are conscientiously followed, success will certainly crown one's efforts, one will have a grateful patient, and, a useful citizen will have been restored to an active life.

TELL THIS THINGS AS THEY COME

*THE sun is bright and the day is fair,
And birds are singing gay;
A breeze is in the air,
And Nature smiles today.
But way off in the eastern skies
A little cloud is seen to rise.*

*Gets darker now, and skies are gray,
The sun's behind a cloud;
A storm is now upon the way,
And thunder peals are loud;
The lightning flashes cross the sky,
A tempest now is raging high.*

*'Twill soon be o'er, 'twill soon be o'er,
And down since Adam's time
The changes come and e'ermore,
It can't be always fine.
We can't control the mighty sun,
Nor stop a rain that's bound to come.*

*A storm is made in life, and we
Feel sure we'll meet success,
The heart is light, our soul we see,
And Heaven seems not to bless,
A misadventure o'er the way,
And then here liberty seems the day.*

*Up from the corner at our right,
And from every pleasant street;
Over the troubles for delight
One very eyes do meet,
I say at the madcaps life we see
The thunders won't to hurt or me.*

*So we enter his happy zone
I and you we sing the sun;
And up and down we'll come, therefore
We'll have rainbows as they come.
He'll give us our good things,
But, we'll have no more rain.*
WILLIAM L. LUGGAR, St. Louis, Mo.

What Others are Doing

THE DIURETIC ACTION OF CALOMEL

In a report of clinical observations on some phases of the treatment of diseases of the heart and their sequels, Dr. Robert Abrahams, (*Ther. Gaz.*, July, 1917) finds, in cases of extensive dropsy or anasarca, the calomel-treatment to be ideal—3 grains three times a day for three days in succession being the dosage. The calomel may, and perhaps should, be combined with 10 grains of sodium bicarbonate; the addition of the latter helping to prevent pyalism. Given in this dosage and for this length of time, calomel acts as a diuretic, and, in the author's estimation, there is not a better diuretic in cardiac disease than calomel, he having used this drug in cardiac dropsy for at least twenty years, "without regrets." He has used it in adults as well as in children, the dose for children being 2 grains three times a day. In this condition, calomel exerts its action and effect upon the kidneys, so that at the end of the three days the patient begins to pass enormous quantities of urine. He saw tremendous anasarca disappear in twenty-four or forty-eight hours. The effect of the calomel on the bowels is comparatively little, most patients having not more than six or eight watery evacuations. Occasionally the calomel does not act until the patient has received two or three doses of diuretin, the calomel, in some individuals, seemingly requiring a "chaser."

The contraindications to the calomel-treatment are: Bad teeth, soft gums, and chronic nephritis. A trace of albumin in the urine is no contraindication, as every cardiac who reaches that stage of the disease has traces of albumin in the urine.

While the calomel is being taken, an antiseptic mouthwash should be used every half hour while awake; its use to be continued for a few days thereafter. The calomel-treatment can be safely repeated, in case of complete or partial failure, in five

days or a week. It must be recorded, however, that at times and for some unaccountable reason calomel completely fails as a diuretic. The author noticed that the failures mostly occurred in those patients who had had the dropsy for a long time or in those in whom the dropsy had reappeared for the fourth or fifth time.

PERNICIOUS VOMITING IN PREGNANCY

Although several theories have been advanced purporting to elucidate the occurrence of nausea and vomiting in gravid women, none of them so far have supplied a sufficient explanation of this annoying complication of the pregnant state, which, as we know, but too frequently passes the limits of what may be called physiological, and, when thus become pathological, is very prone to be all but unmanageable.

Certain it is that at least the severer forms of vomiting indicate an intoxication of some sort, and Hirst has suggested that it is due to the cessation of absorption of the corpus-luteum secretion, the passage into the blood of which seemingly exerts some regulating action upon certain nerve-centers.

In a brief communication to *The American Journal of Obstetrics and Diseases of Women and Children* (Aug., 1917), Dr. A. Y. P. Garnett expresses the opinion that the nature of this empoisoning should be determined and studied with the aid of the Abderhalden reaction. He has found (and this is the important point of his communication) that the blood of women, after their delivery, contains certain substances that are capable of supplying what is lacking in pregnant women subject to vomiting. Consequently, he performed transfusion of such blood in several cases, and with very satisfactory results; arriving at the conclusion that blood transfusion from recently delivered women is the only satisfactory means of relieving pernicious vomiting of

pregnancy, and that this measure is suggestive of unlimited possibilities, if proved curative in this form of toxemic pregnancy.

In this connection, an article by Eugene Cary, on "the use of desiccated placenta, with special reference to the vomiting of pregnancy" (*Surg., Gyn. & Obstet.*, Aug., 1917, p. 206), is of interest.

Briefly, it may be said that, after a theoretical discussion of the subject, this author reports on having collected 13 cases of vomiting in pregnancy, in 7 of which patients the vomiting stopped within a day or two after they received desiccated placental substance, the nausea soon disappearing, also. Two patients improved and remained fairly free from nausea, although the remedy had to be continued over a longer period of time. In 2 cases, the results were not satisfactory. Two of the patients were lost sight of.

Doctor Cary also mentions that, at his suggestion, Doctor De Lee has used desiccated placenta in 6 cases, with good results in 3 and varying success in the remaining 3 patients. It may be mentioned, by the way, that Doctor De Lee has also used this remedy in 2 cases of urticaria of pregnancy, from which prompt and lasting relief was obtained.

AUTOSERUM TREATMENT OF CHOREA

Since the idea has gained ground that chorea probably is due to an infection with a streptococcus of relatively slight virulence, attempts, naturally, have been made to treat this malady specifically by immunizing the victim; this idea culminating in the suggestion made by Goodman (*Arch. of Pediatr.*, Sept., 1916) to employ the method of autoserotherapy in these cases. Aside from several reports published by Goodman himself, there also is an account by H. J. Faber (*Calif. State Jour. of Med.*, July, 1917) on the treatment with this method. Likewise, in *The Medical Times* for July last, Dr. Jacob Diner presents a brief history of 3 cases treated by this method, in which he proceeded as follows:

Blood (30 or 40 mls, or Cc.) is withdrawn, by venipuncture under aseptic precautions, into large-sized centrifuge-tubes (60 to 75 mls). The blood is allowed to clot by keeping in the ice-box for several hours. Then it is centrifuged, at a speed

of 3,000 revolutions per minute, for one hour. After the serum has been pipetted off into a sterile graduated container, it is heated in a water-bath for one hour at a temperature of 56° C. Finally, sterile 0.85-percent solution of sodium chloride is added to produce a 40-percent dilution.

Lumbar puncture is done in the customary manner; the spinal fluid is withdrawn until it merely trickles out (generally about 25 or 30 mls), after which an amount of diluted serum slightly less than the amount of fluid withdrawn is introduced into the canal under its own gravity, without forcing.

After the injection, the patients were kept flat on their backs and as quiet as possible. No medication was given for several days previous to the serum treatment.

One of the three patients treated was a girl sixteen years of age, who had her first attack of chorea at the age of six, and she was discharged, free from choreiform movements, three weeks after the treatment. A boy thirteen years of age, giving a history of rheumatism and presenting symptoms of chorea during the last few weeks, was discharged about three weeks after the treatment, and observation since then had proved him to be free from symptoms. In the case of a girl nine years old, whose mother had had chorea at the age of twelve, the illness began three weeks previous to her admission to the hospital. The serum treatment was followed by marked improvement, which had been maintained two months after treatment.

It should be mentioned that none of these three subjects have been observed for a sufficiently long time definitely to establish recovery, chorea being notoriously subject to recurrence after a seeming cure. Nevertheless, there is a probability that the treatment really has effected a cure, inasmuch as the injections of the serum were followed by marked reactions and thereafter the choreic movements diminished decidedly and ultimately ceased entirely.

The author presents a plausible explanation as to the probable rationale of this mode of treatment. The transference of substances from the subarachnoid spaces into the blood, he says, can take place with greater ease than in the opposite direction, particularly under increased intraspinal

pressure. Assuming chorea to be an infection localized in the cord, a theory often advanced by many observers, we can imagine the possibility of the antigen finding its way into the circulation and thus stimulating the production of antibodies, which can not find their way back into the spinal fluid and cord, because of the lower pressure obtaining in the circulation and the obstacle offered by the choroid plexus. Now, by introducing the patient's own serum—presumably rich in antibodies—direct into the spinal space, we have at hand, analogous to the rationale advanced by Flexner, with regard to epidemic cerebrospinal meningitis, the means to combat this infection—an infection that, in view of its mode of onset and general progress, appears to be of a subacute or even chronic type.

TREATMENT OF POSTOPERATIVE PARALYTIC ILEUS

Postoperative ileus is a complication that is justly viewed with serious alarm by the surgeon, and often calls for operative relief at a time when the chances for recovery already are seriously impaired.

In a discussion of this subject, Dr. O. S. Fowler (*Ann. of Surg.*, Aug., 1917) refers to the fact that the subjective symptoms in this condition may be misleading, since the patient is quite likely to assure us that he is feeling "fine." If the surgeon permits himself to be deceived by this, the margin of safety may be lost and operative relief undertaken too late.

Doctor Fowler insists that the usual medicinal treatment for postoperative gas should be instituted early, including enemas, hot stupes to the belly, eserine (1-100 to 1-50 grain), pituitary solution (1 mil, or Cc.), the latter given every hour for three or four hours, at occasional periods, unless it has a bad effect upon the heart. Goth recommends physostigmine salicylate, 1-65 to 1-32 of a grain, and digalen, 15 minims, every three hours; strychnine, 1-30 to 1-15 grain every three hours; and caffeine-sodium benzoate, 2 to 3 grains every three hours—these last three alternating, by a dose each, to support the heart. Cathartics are useless and perhaps even damaging. Gastric lavage should be done every one, two or three hours. However, the best of all is, to administer large quantities of water, both by colon and by hypo-

dermoclysis, to total from 10 to 16 pints each twenty-four hours. Bonney suggests adding 1 ounce of brandy to each quart of saline infusion.

If the above medical measures fail to give relief within from twelve to eighteen hours after instituting them or if the patient should get worse in the meantime, then resort must be had to surgery, without further ifs and ands or continued waiting-policy. The paralyzed gut must be drained positively at once. This operation, as we know, was successfully done, in 1787, by Rénault, following the suggestion by Louis in 1757, and later was revived by Nélaton, in 1840; so, we should not hesitate to undertake it, for the want of sufficient precedent or for the lack of the stamp of age upon it.

A CASE OF CHRONIC ASPIRIN-POISONING

Since aspirin-poisoning is not of frequent occurrence, it may be interesting to cite a case described by W. Fletcher Stiell, in *The Practitioner* (London) for September last. The patient was a woman of fifty, who about thirteen years ago became afflicted with typical rheumatoid arthritis. Variable methods of treatment being without avail during the first five years, aspirin was for the first time prescribed in 1910, and with such decided benefit that from that date on 10 grains of the drug had been taken by the woman twice daily for the last seven years. Any diminution of the dose, even without the patient's knowledge, was at once followed by complete incapacity; however, at no time were there any signs of gastrointestinal irritation or of cardiac or mental depression.

The first untoward sign, that is, of aspirin-poisoning, was observed in January, 1917, in the form of an intractable simple conjunctivitis, the patient complaining of "sand in the eyes." Examination revealed a well-marked hyperemia of the palpebral as also of the ocular conjunctiva; there was a slight degree of chemosis and considerable laceration. As no evidence existed of either a local or occupational irritation, the patient was advised to discontinue the aspirin. Unfortunately, this course was immediately followed by a reappearance of the rheumatic symptoms,

so that recourse to the remedy was inevitable.

A week later, the patient gradually became troubled with an urticarious eruption, which was not relieved either by dietetic or by the usual local and internal remedies, and after a few days, her entire body was covered with a typical urticaria major. The rash, which persisted both day and night, assumed, in some parts, the character of acute circumscribed edema and elsewhere that of severe urticaria bullosa.

The symptoms rapidly became somewhat alarming. The patient was weak from insomnia, there now appeared obvious signs of intestinal irritation, in the form of diarrhea and vomiting. There was a massive edema of the tongue and fauces, so that dysphagia became a marked symptom, and even an urgent tracheotomy was only averted by the prolonged administration of ice and ice-water combined with astringent gargles. Vision was entirely obscured by an extreme palpebral edema. The urine exhibited an intense bluish-violet reaction with ferric chloride, but, the exact percentage of salicylic acid was not estimated.

The diagnosis of chronic aspirinism having been made, this drug was rigidly withheld. Ichthyol, 5 grains, a mixture containing Fowler's solution of arsenic, tincture of belladonna, and calcium lactate, three times a day. Bromides were administered in large doses every night. At the end of the seventh week, every trace of the urticaria had vanished and the urine was normal again.

An interesting feature of the case is the fact that, since the outbreak of the urticaria, every trace of the former rheumatic pains has been absent, although the aspirin has been entirely discontinued.

THE DIARRHEA OF THE FIELD-ARMIES

In discussing the occurrence of the simple diarrhea that is so prevalent among soldiers in the field and which sometimes affects whole regiments, Dr. A. Haris (*Paris Méd.*, May 19, 1917) declares that it has been found impossible to determine the cause with any degree of certainty. Although fatigue and overexertion have been believed to be responsible, he discards

all of them, but, mentions that the soldiers themselves most frequently attribute their trouble to catching cold. In addition to this, the excessive indulgence in meat and (particularly, unripe) fruit, and similar indiscretions, may stand in causal relation.

Whatever the cause of this simple camp-diarrhea may be, its treatment, according to the author, should consist in the intelligent employment of astringents, opium, intestinal antiseptics, ipecac, and sodium sulphate.

Opium and also bismuth act very well, though only during the first two days of the attack, after which they no longer influence the course of the trouble. Other astringents, (such as tannin) seem to have but a feeble effect; which, however, may be owing to insufficient dosage. An alcoholic extract of walnut-hulls is a popular remedy of decided merit. Furthermore, alcohol (in dilution) is of decided service in camp-diarrhea and may very well relieve the trouble without additional measures.

Ipecac, in broken or in massive doses, has not seemed to the author to be effective, neither have various intestinal antiseptics (benzonaphthol, for instance) proved of use.

The treatment best known and most often employed is, to prescribe sodium sulphate in doses of from 5 to 20 Grams, or even more, to be taken during the day. The author is convinced that larger doses than the customary 5 Grams must be taken; also, that the dose must be repeated if the effect is not noticeable by the second day.

When the diarrhea has assumed the chronic form, with discharges of viscid ("glairy") mucus, then sodium sulphate becomes useless, and the colon now must be treated locally.

While it is interesting to take cognizance of these therapeutic procedures proposed by our French colleague, we cannot but think that persistent diarrhea, such as is liable to occur in military camps, can be treated with greater certainty of success. We think, first of all, of the combined sulphocarbolates of sodium, calcium, and zinc, despite the unfavorable opinion expressed by the author concerning the efficacy of intestinal antiseptics. After the usual preliminary cleanout, we should administer these, with the zinc salt in relatively large amounts, or, then, we would be strongly inclined to order the sulphocarbo-

late of copper alone—giving it, of course, in solution. In place of the crude ipecac, emetine hydrochloride by mouth or, better, subcutaneously or intravenously, will be more reliable and very probably will be all the medication that is required besides the astringent sulphocarbolates.

Great emphasis should be placed upon the diet and upon rest in bed until the diarrhea has been overcome. And, above all, the prophylactic measures of camp sanitation must be enforced with the minutest care.

LIQUID PETROLATUM IN THE TREATMENT OF GASTRIC AFFECTIONS

An incidental finding after a course of liquid petrolatum is related by Dr. Heinrich Stern. (*Amer. Med.*, Aug., 1917), this being that patients affected with certain gastric ailments and at the same time suffering from intestinal stasis, and who were in the habit of taking this mineral oil for this condition, often cease to complain of concomitant stomach disturbances.

Among the affections which symptomatically are those especially amenable to the favorable action of mineral oil are hyperchlorhydria, excessive acidity due to organic acids, pylorospasm, and gastroduodenal ulcer.

In many of these conditions, vegetable oils frequently are prescribed, these having the advantage of possessing some nutritive value. Against this, it is to be urged that mineral oil, not being disintegrated and absorbed, does not give rise to the production of cleavage-products of an acid nature; also, mineral oil does not ferment, and, hence, is free from any objections that may be advanced against the employment of vegetable oils on this score.

In all probability, the action of mineral oil in the upper digestive tract is the same as in the lower, namely, it is a purely lubricating one. In cases of gastric disturbances, Doctor Stern advocates rather large doses, two or three tablespoonfuls either before or after meals and, if necessary, at bedtime.

In general hyperacidity and hyperchlorhydria, he says, it is best to direct the mineral oil to be taken from fifteen to thirty minutes after meals. If, however, the acidity is due to gastric atony and hyperfermentation, the logical time to take

the oil appears to be about twenty or thirty minutes before meals. In pylorospasm and probably also in cardiospasm, the affected parts should be bathed in the mineral oil for as long a period as possible, and the author witnessed the most practical benefit from giving the oil in very small and frequent doses during the critical periods.

In gastroduodenal ulcer, the mineral oil should be given in broken doses before, during, and after meals, the limit of dosage being determined by the laxative effect.

It goes without saying that other indications presenting themselves in the individual cases must receive attention; but, Doctor Stern's suggestion concerning the use of mineral oil appears to possess great merit and should be adopted, it being, of course, important to secure an unobjectionable preparation of the oil.

SWALLOWED FALSE TEETH EJECTED BY MEANS OF APOMORPHINE

Two interesting cases of the removal of false teeth swallowed during sleep and lodged in the gullet—in both instances the four upper incisors—have been reported by Doctor Gerstein (*Muench. Med. Woch.*), relief having been secured by means of emesis induced with apomorphine. Both times the procedure adopted was very simple, but effective.

The subject received a hypodermic injection of 0.005 Gram (1 ampule) of apomorphine over the chest, then he was placed upon the table, with head protruding and neck strongly stretched, while the forehead was being supported. Vomiting began to set in in about five minutes and the teeth were expelled in ten or twelve minutes. This prompt effectiveness of the apomorphine recommends it for use for the rapid emptying of the stomach in cases of poisoning, especially with alcohol or spoiled food.

GREEN DISCOLORATION OF APOMORPHINE NOT DETRIMENTAL

Doctor Gerstein, cited in the foregoing paragraph (*loc. cit.*) tells of how in two instances he employed ampules of a solution of apomorphine that had been in his possession fully five years. The liquid had assumed a strong green color; however,

its effectiveness was not in the slightest diminished, and no untoward effects resulted from its use. He prefers the form of ampules, as thus no delay in its use is occasioned.

EARLY PERTUSSIS AND ERYTHROCYTURIA

As a rule, it is not easy to distinguish between a bronchial catarrh, in children, and the incipient stage of whooping-cough; important as that is, particularly during an epidemic of this by no means harmless infection. Consequently, the discovery, announced by F. Kornmann, of Davos (*Munch. Med. Woch.*), of a new early diagnostic sign, before the spastic accesses, will prove highly important, if supported by wider experience. Kornmann's statement is to this effect:

The author was prosecuting a systematic investigation on the probable influence of tuberculin injections upon the composition of the urine of children after diseases liable to affect the kidneys, and it was then that he discovered that, four or five days before the appearance of the characteristic spasmodic cough in children having bronchial catarrh, there were present in their otherwise normal urine red blood cells and blood casts; that is to say, before the whoop had developed, there existed a slight hematuria such as may be designated as erythrocyturia. This observation was made in 4 out of 5 cases in his series.

It should be mentioned that the presence of renal lesion was rigidly excluded in every instance; also, that the tuberculin-therapy and urinary tests had been instituted before the appearance of any bronchial symptoms.

Under the circumstances, Kornmann concludes that the renal hemorrhage in these cases must be a form of diapedesis, and that, hence, the toxin of pertussis is more deleterious to the blood-vessels of the kidney than to its parenchyma; for, ordinarily, hemorrhage (of brain, conjunctiva, choroid, kidneys, etc.) occurring in whooping-cough results from sudden pressure and bursting during a paroxysm.

In addition, the author suspects that early erythrocythemia is more prone to occur in children suffering from an exudative diathesis, in consequence of which there is a greater tendency to spasm and the kidneys become more readily deranged

in their functions, both owing to the inferior composition of their bodily fluids. (For this latter reason, Kornmann advises, incidentally, to put suspected children upon a diet devoid of albumin and purin.) In two instances, it is true, albumin and casts occurred in the urine, but, these may be referred to the febrile condition, inasmuch as they were absent before the bronchial attack. The tuberculin was omitted, of course, as soon as the bronchitis showed.

The author finally adds: "These cases demonstrate the possible bearing of tuberculosis of the bronchial glands upon the etiology of pertussis."

EARLY SYMPTOMS OF PERTUSSIS AND SOME OF ITS DANGERS

While in the prodromal bronchitis of pertussis, as also in the postspasmodic stage, the influenza-bacillus is predominant, the specific inciter is the gram-negative Bordet-Gengou bacillus; but, although readily demonstrable after the development of the spasmodic, second, stage, it rarely is discovered earlier than that. Consequently, the microscopic method is worthless for early diagnosis and, hence, of no avail to prevent diffusion of the infection. Accordingly, in his article cited in the foregoing paragraph, F. Kornmann (*loc. cit.*) enumerates as symptoms worth noting, besides the early mild hematuria (above described), the following indicative of the disease:

1. Despite the fever in the first stage, the urine grows paler, contains much uric acid, and has a high specific gravity.
- (2) There is an early high-grade lymphocytosis and a slight polynuclear, neutrophile leukocytosis; while the eosinophiles are increased (which, though really is a mark of the predisposing exudative diathesis.)
- (3) Characteristically rapid decline of the fever near the end of the first stage, despite the continuance of the bronchitis, which now assumes a dry character, with viscid expectoration. By the way, the author believes that the urinary phenomenon described in the preceding paragraph is a sign of the first dissolution of the specific organism; for, according to Bordet and Gengou, this bacillus does not engender any toxin, but its body itself is very toxic, by virtue of its endotoxins.

Everything possible should be done to prevent the spread of whooping-cough, be-

cause of its frequent serious consequences, aside from its high mortality rate. Today, says the author, it is well known that this disease plays an important role in the development of tuberculosis, especially pulmonary tuberculosis; notably in making manifest and aggravating tuberculosis of the bronchial and hilus glands. While an attack is very dangerous for young infants, a subsequent attack of tuberculosis will constitute a doubly grave danger later in life. Hence, every means for recognizing the disease early should be accounted as welcome by clinicians.

A PRACTICAL TEST FOR THE ADSORPTIVE POWER OF ANIMAL CHARCOAL

The tests in vogue for the usefulness of bloodcoal (animal-charcoal) have two ends in view—to discover the percentage of impurities present (treatment with acids and alkalis) and to determine how much of a given substance it is capable of abstracting from water; for this latter purpose some dye (methylene-blue) generally being chosen. However, not all substances are equally acted upon, nor can their disappearance always be as readily established; consequently, in view of the rapidly increasing importance of bloodcoal, as well as of white bole (fullers-earth), as a remedial agent, additional modes of testing must be welcomed. Such a test has been supplied (*Ther. Monatsh.*, Nov., 1916) by M. Guggenheim, of the physiologic-chemical laboratory of Hoffmann-La Roche & Co., and it is based upon Pflueger's method of observing the effect of the agents upon a still vitalized and motile segment of the ileon.

Specifically, a piece of the small gut of a cavy, about 2 cm. in length, is suspended in 100 mils of Ringer's solution through which oxygen is being passed. When now this contractile organ is brought in contact with a kymograph (registering apparatus), the peristaltic waves will be traced upon the smoked paper. It is evident, that the presence of foreign active agents must influence the muscular contractions and correspondingly modify the tracings.

The application to the object under consideration is plain, of course. Guggenheim prepares a solution of the poison (alkaloid, toxins, etc.) to be tested for and then adds to it, with shaking, enough of

the adsorptive material (bloodcoal, charcoal, bolus, talcum, etc) until the sedimented solution no longer exerts any toxic action upon the segment of the gut. The amount of the adsorptive material used relative to the poison constitutes the index of fixing-value. It is especially interesting to note that Guggenheim employed as his toxic agent, principally, beta-imidazolylethylamine hydrochloride, the basic part of which constitutes one of the poisons common in intestinal intoxication.

The procedure is as follows: Prepare a 1 : 1000 solution of the poison named, then to 100 mils of this add 1 Gram of the bloodcoal. Shake, filter, then add, 1 mil of the filtrate to the Ringer solution holding the test-gut, and observe the effect. Proceed to add more and more of the bloodcoal, until the filtrate no longer produces any visible effect upon the gut, as indicated by the kymograph tracing.

THE MEANING OF "DYSHORMONY"

Dyshormony is the very happy designation applied by Oscar Kohnstamm, neurologist, to the condition in which, by virtue of somatic disturbances of one or more of the endocrine glands, the normal balance between the internal secretions is disarranged, with the unavoidably abnormal physiologic and psychic consequences. The organs notably involved in this field are the thyroid, suprarenal, pituitary, parathyroid, sexual, hepatic, and pancreatic glands.

CURE OF INFANTILE HYPOTHYROIDISM BASED ON CONGENITAL SYPHILIS

A case of hypothyroidism dependent upon congenital syphilis in a child has been described by Carczynski in the *Medizinische Klinik*, the subject being a peasant girl of 15 years whose father, it is quite certain, had died of some syphilitic affection. Since the importance, in the economy, of the endocrine glands is becoming more fully recognized, the present case is of interest in that it may serve to throw light upon other, otherwise obscure, conditions under the care of practitioners.

This girl from little up had been undersized and delicate, growing slowly and remaining behind mentally. She could not be induced to do chores, showed no interest in feminine work, did not learn to read

and write, preferred to sit quietly by herself, but occasionally would fly into a temper, scolding and cursing, without any reason. The body was inharmoniously developed, the trunk being too large, the extremities too short, the head too big, while the skeletal infantilism was radiographically evidenced in the nonclosure of the epiphyseal suture. The facial expression was coarse and unintelligent, although not exactly cretinoid. Mental tests demonstrated great backwardness and she was suspicious. The skin was very pale, very dry, and lacked elasticity; the fat was deposited unevenly, being unduly accumulated about the cheeks, chest, buttocks, and especially the abdomen; the other parts being normal. The hair was extremely sparse. The blood-picture showed great diversity and uneven coloration; however, in every smear there were present occasional poikilocytes, macrocytes, and normoblasts, while the mononuclears were increased, the eosinophile cells were decreased. The number of the marrow-cells was relatively large. In addition, the Wassermann reaction for syphilis was found to be definitely positive.

Thus the picture of defective functioning of the thyroid gland since infancy is complete, and the therapy, in connection with the associated luetic condition readily is indicated.

Treatment was begun with thyroid-gland extract, in sharp dosage, but soon the characteristic signs of oversaturation—cardiac, respiratory, and thermic derangement—became evident; which, however, passed away upon discontinuing the course. After a prolonged interval, the medication was resumed, but, very cautiously, and the dosage was gradually increased; which, after a course of weeks' duration, resulted in a slight mental improvement of the girl. Now an antiluetic course was instituted with intramuscular injections (12) of enesol (mercury salicylarsenate) and, internally, potassium iodide—the latter continued for several months. Then followed another course of 12 enesol injections. After that, the girl received ovarian tablets, in increasing dosage—36 in all and, finally, she was given some tincture of pilular extract.

The outcome, as far as the patient was concerned, was excellent, as could also be demonstrated by comparative photographs. The girl's

entire bodily and mental condition was changed, and all the pathologic signs previously present had as good as disappeared at the time of reporting.

THE TREATMENT OF TRACHOMA WITH BULGARIAN-BACILLUS CULTURE

Having described, last year, in *The Journal of the Tennessee State Medical Association*, his method of treating trachoma with applications of Bulgarian-bacillus cultures, Dr. J. P. Crawford (*loc. cit.*, June) demonstrated the results of this treatment in 20 cases of trachoma involving pupils of the Tennessee School for the Blind. The patients had all been in the second and third stage of the disease, and all of them had been benefited decidedly by the treatment.

Doctor Crawford declares that the first thing to be considered is, to preserve as much of the normal tissue as possible, and, hence, to avoid any operative work, unless this will shorten the course of the treatment very much without adding materially to the scar-tissue. In his experience, applications of the Bulgarian-bacillus culture will cure the vast majority of the cases, and leave less scar-tissue than is commonly seen. However, where the granules are large and numerous and do not readily yield to the treatment, they should be opened and evacuated, after which the application of culture will materially shorten the course of the disease. To quote the author:

"In all cases, I have the patient bathe the eyes several times a day in hot water. As the case improves, I use the culture once a day. After the granules disappear, the conjunctiva will have a velvety appearance. I then discontinue the culture and use a 10-percent solution of argyrol, or some of the other albuminous silver salts, once a day. Continue the hot water and add saturated solution of boric acid several times a day. In case of cloudy cornea or pannus, I use dionin solution, one drop every other night. In no case, do I believe we should use the Knapp roller-foreeps, as we have all been accustomed to do in these cases. In fact, I think we could get quite as good results by using an ordinary pair of dressing forceps, to expel the

contents, in case we did not have the roller-forceps."

This treatment not only is very simple, but, it is accompanied by astonishing freedom from pain, so that the patients do not dread the application. Without claiming any specific value for Bulgarian-bacillus cultures in the treatment of trachoma, the author justly considers the fact significant that there has not been a single failure in the forty-one eyes treated by his method.

UNUSUALLY BRIEF INCUBATION-PERIOD OF TETANUS

In *Ellingwood's Therapist* for August, Dr. J. N. Milner reports a case of tetanus in which tetanic symptoms became manifest in the unusually short time of three hours after the injury was sustained. We have been under the impression that from one to four days must pass for a sufficient intoxication of the nerve-cells to be produced to give rise to any spasmodic symptoms; indeed, Doctor De Lorme's recent book, "War Surgery," is the only one in which we found mention of shorter periods of incubation than twenty-four hours, he declaring that tetanus may appear a few hours, or even within a few minutes, after the infliction of the wound, although generally between the sixth and eighth day; still, occasionally later than this.

Doctor Milner's case concerns a boy nine years old, who had stepped upon a "6-penny" nail protruding from a plank and penetrating about an inch at about the union of the toes to the metatarsus. The father of the boy said the nail was a little hard to withdraw and that it was rusty. The mother applied oil of turpentine, kerosene, and sugar, to the injured member and the boy did well and was quite cheerful for more than two hours. Then he began to whimper and said that his head ached and his jaws were hurting badly; and he continued to fret until his crying became unbearable and he finally was brought to the doctor's office, a distance of four miles, where he complained of his jaw hurting severely and that he was unable to open his mouth.

In addition to appropriate local treatment, the little patient was given echinacea. However, he rapidly grew worse, and spas-

modic jerking of the legs and thighs, also of the muscles of the abdomen set in. Now a hypodermic injection of subcutoid lobelia (30 drops), also another dose of echinacea by mouth, together with 2 drops of specific medicine of gelsemium, were administered, and this was followed by some improvement, the spasms becoming lighter and less frequent.

The important point in this case is, that the patient recovered under continued treatment with echinacea; however, owing to a peculiar susceptibility, the lobelia made him terribly sick and he vomited copiously.

It is the general experience that cases of tetanus of short incubation are much less favorable prognostically than those in which the tetanic symptoms do not appear until late. There can be no doubt about the diagnosis in this instance, and the remarkable severity of the intoxication made the case an exceedingly grave one. All the more reason for appreciating the prompt and effective antitoxic action of echinacea, assisted by the antispasmodic effect of lobelia.

PITUITARY EXTRACT IN INCONTINENCE OF URINE

Seeing that, in the majority of cases of nocturnal and diurnal incontinence of urine, the essential cause is, atony of the sphincter-muscle of the bladder, which may or may not be accompanied by local changes, and also that the general clinical experience with the customary treatment of this condition is almost always inefficacious, Dr. N. A. Mikhailow, of Petrograd, began to employ in these cases pituitary gland as a superior stimulant of involuntary muscular-fibers, and he reports (*Urol. & Cutan. Rev.*, Oct.,) that his results have been most encouraging. After three or four subcutaneous injections of the pituitary extract, given once a week in doses of 0.2 to 1.0 mil (Cc.), depending upon the patient's age, incontinence of urine has disappeared in even the most inveterate cases, and there has been no recurrence for three or four months.

Altogether, the author had thus treated 19 patients at the time of reporting, 10 of whom were children and 9 adults. He appends condensed histories of all these cases.

Miscellaneous Articles

Studies on Food Economics

VII. VIII—Grilling: Broiling: Frying: Roasting; Stewing

INASMUCH as the flesh of animals forms such an important part of the diet of man, civilized as well as barbaric, and the further fact that the price of meat, as of other foods, has advanced in recent years, it is natural for housekeepers to seek more economical methods of purchasing and preparing meat for the table and to turn their thoughts toward the less expensive cuts and what economy is involved in their use, likewise, and how such can be prepared by cooking and, yet, be as nutritious and palatable as the higher-priced parts. It is the object of this paper to furnish data for the housekeeper.

Count Rumford states that a codfish or some other equally solid fish flesh reinforced by beans is a savory and nutritious dish for a poor man and costs but one-third the price of beefsteak. A chemical analysis proves this.

Count Rumford goes on to say: "Savory dishes, serving to vary the monotony of the poor hard-working man's ordinary hard fare, afford considerable moral as well as physical advantage. To illustrate: "When wandering alone through Norway, in 1850, I lost the track in crossing the Kjolen field, struggled on for twenty-three hours without food or rest, and arrived in sorry plight at Lom, a very wild region. After a few hours' rest, I pushed on to a still wilder region and still rougher quarters, and continued thus to the great Jostedal table-land and unbroken glacier of 500 square miles; then descended the Jostedal itself to its opening on the Sogne fjord—five days of extreme hardship, with no other food than flat brød (very coarse oateake), bilberries, gathered on the way, varied on one occasion with the luxury of two raw turnips. Then I reached a comparatively luxurious station, where ham

and eggs and claret were obtainable. The first glass of claret produced an effect that alarmed me—a craving for more and a stronger drink that was almost irresistible. I finished a bottle of St. Julien, and nothing but a violent effort of will prevented me from ordering brandy.

"I attribute this to the exhaustion consequent upon the excessive work and unsufficient, unsavory food of the previous five days; have made many subsequent observations on the victims of alcohol, and have no doubt that overwork and scanty, tasteless food is the primary source of the craving for strong drink that so largely prevails, with such deplorable results, among the class that is not exposed to such privations."

Raw meat is more easily digested, as a rule, than cooked meat. Meat, however, rarely is eaten raw by civilized people; it is either broiled, fried, stewed or roasted. Each process has peculiar advantages. Stewing the writer believes to be the most economical way of cooking meat.

From his experience and taste, he considers that broiling and roasting best fills the bill.

These different forms of cooking will be discussed further on. Among the working class of Great Britain, the toothsome Irish stew is a favorite dish.

Down east, in the United States, potpie takes precedence. This method of cooking, however, is not a favorite with most housewives, due, doubtless, to a lack of knowledge of the fundamentals of cooking.

Stewing.—To obtain the best results, the meat should be cut into small pieces, so as to present the greatest surface to the solvent action of the hot water in which the stew is prepared. These small pieces should be put into cold water and the same

be allowed slowly to come to the temperature of about 180° F. and allowed to remain thus for some time, in order that much of the soluble juices and flavoring extract be dissolved out.

If the water be brought to the boiling-point (of 212° F.) and kept at this temperature for any length of time, the meat will be dry and fibrous. The albumin and fibrin have become thoroughly coagulated, and, while the fibers have separated from each other, the extreme heat only has made them drier and firmer. After the stew-meat has cooked for a considerable time, vegetables and condiments may be added, likewise barley, rice or dumplings.

It is not necessary that the meat used in such a stew should be an expensive cut. That portion of the lean meat, or muscles, taken from the lower portion of the legs, just above the hocks, will be found just as palatable and nourishing as the most expensive cuts.

In the writer's boyhood, we have often been fed on a stew in which the hock was the principal ingredient, and it was most nourishing. To this day, he enjoys a rich soup made from the hock to which a portion of the muscular fiber is attached.

Today, while this is written, when economy is so much in demand, it should be the aim of every one of moderate income to strive to learn the best mode of cooking at the least expense. The curse of Florida today is the tin can. But, that curse is likely to become a thing of the past, owing to the scarcity of tin and the requirements of our millions of soldiers to be called into service.

Boiling Meats.—The difference in the cooking-media constitutes the difference between broiling and roasting, and that between a soup and a stew.

In boiling a leg of mutton or a piece of beef in water, the end to be obtained is the reverse of that in making soup, or a stew, and we aim to retain as much as possible the natural juices and flavor in the meat, while in the case of the former the object is to extract as much as possible both the juices and flavor.

To retain the greatest amount of juices and flavor both in boiling and in roasting meat they must at first be subjected to the greatest amount of heat they will bear *at the start*, and this, in order to coagulate the albumin and fibrin of the surface layer

of the meat, thus forming an impervious coating that shall prevent any further loss of soluble material. The meat thus treated is cooked in, and by means of, its own heated juices.

If this heated condition is long continued, the gelatin, albumin, and fibrin will be softened, the juices retained, the flavor improved, and the meat be tender.

To boil a piece of meat, the procedure should be followed: Place the meat into a vessel of boiling water that is at a temperature of 212 degrees; allow it to remain at the same temperature for about ten minutes. Then let the water cool down to a little below 200 degrees, and let it remain so for several hours. The length of time matters little. If one possesses a "fireless" cooker, the meat, after remaining in the boiling water ten minutes, may be removed to the cooker, there to continue the cooking-process by means of its own heated juices.

In *roasting* a turkey, or a joint, or a piece of meat before an open fire or in an oven, the meat is exposed to convected or radiant, heat. The albumin and fibrin of the outer surface of the meat are coagulated, thus forming an impervious coating and preventing the loss of juices and flavor in the further cooking-process.

It is the usual custom, when roasting a piece of meat, to baste the same with hot fat of some kind. Now, as meat-fiber contains a certain amount of sugar, the heat conveyed to the meat partly carbonizes both the fat and sugar, changing them into a kind of caramel. This conversion of sugar and fat into caramel is attended with a change of flavor; a kind of pleasant bitterness replaces the sweetness. Now, the outside brown of roasted meat has a much higher flavor than the inside portion. Some of this outside flavoring material leaves the meat and is found in the baking-pan, together with the basted and partly carbonized fat. The good cook utilizes this to form a nice brown gravy. Removing the meat, she places the pan over the fire, proceeds to dredge some flour into it and browns it. Now adding some boiling water and salt and boiling the mixture for a minute or two, she has a delicious brown gravy.

There is another way in which the richness and amount of this brown gravy may be increased, namely: Before placing the

meat into the oven, grease it with butter or fat of some kind and then slightly dredge with pulverized sugar and flour. Meat thus prepared will tempt the poorest appetite.

Frying.—There is another, and quicker, process of cooking meat, namely, frying. The same principle of cooking properly is embodied in the making of a roast or broil.

Palatability should be first considered; next, the conservation of the juices of the meat cooked should be looked to. An experience of the writer in northwestern Ohio, in 1869, will illustrate this. One day, one of the boarders at the hotel remarked early in the morning, "Doctor, we're going to have some venison steak for breakfast." At the meal we were served a piece of insipid meat most resembling cooked sole-leather. Now, venison is a dry meat and requires, in cooking, that its juices be conserved. In England gormands have their venison enclosed in a dough made of water and flour before it is roasted or baked. This coating preserves the juices of the meat from being lost, also its flavor.

When Marie Antoinette was informed of a famine in the Tyrol, she remarked, "I should rather eat crusts than starve." Now, it is the habit of these peasants to cook their meat, chiefly young veal, by rolling it in a kind of dough made of white-pine sawdust, flour, and water. This envelop, called *crouton*, literally means meat pie-crust, and this meat-covering was fed to the hogs. The uninformed French surrounding the queen laughed at her saying, supposing she meant the ordinary crust of pot-pies. However, this anecdote, though instructive, is but a digression.

To return to the frying pan—which, by the way, should be discarded from the cooking utensils of the ordinary housewife until such time as it be used properly understood by her.

In frying, the pan should be made so hot as to sear and coagulate the albumin and fibrin of the surface of the meat exposed to the heated pan, then the piece should be turned over and the process repeated on the other side. But a short time over the fire is required to obtain a well-cooked and juicy steak equal to one that has been broiled. Here is another way. Place a pan containing a quantity of fat or oil over the fire. Let the fat reach a temperature of over 300° F. Place the

steak or chop to be cooked in this superheated fat and cook for about the same time it would take to fry it without fat.

A. T. CUZNER.

Gilmore, Fla.

LOBELIA AS A DECONGESTIVE, ANTISPASMODIC, AND ANTITOXIC

Having my attention called to the virtues of lobelia about a year ago, I gave it a clinical tryout, and the following are some of my cases:

Case 1. A woman came to the office with a very harassing cough and said the tickling was just below the voice-box. I tried to reach it with a soothing spray by means of the compressed-air tank, but without effect. I next tried cold applications to the front of the neck. This did no good. Then I changed to hot applications. Also no good. Then codeine was tried, and she got no relief except when well under the influence. With morphine it was the same. Atropine and emetine were tried, but only made matters worse. By this time, I had heard from the calomel and podophyllin cleanout, followed by sodium hyposulphite. Still, she was coughing "her head off." She said that a spot about the size of a nickel was doing the mischief.

I then thought of lobelia, and, having Lloyd's subcutoid, used that, injecting 30 minims of it in the afternoon. Relief came in forty minutes. At about midnight, I was called and found the patient coughing again. Another hypodermic of 30 minims of the lobelia afforded some relief in thirty minutes, when I injected sixty minims and left; the patient next morning reporting that she had vomited three or four times after I had left. She has been free from the trouble ever since.

Case 2. A railroad worker came into my office, complaining of headache, backache, pain all over, and of a feeling of malaise (as old Doctor Jenkins, of Keokuk, used to describe it). I diagnosed grip and at once gave a hypodermic injection of thirty minims of my lobelia. It acted like magic, for, he was free from pain in twenty minutes. I then gave him 6 granules containing podophyllin, 1-6 grain, and calomel, 1-6 grain, to be taken one hour apart. This was to be followed by 1 fluid ounce of a saturated solution

of sodium hyposulphite in distilled water. He "answered the call" and went to work the next day.

Case 3. A woman 78 years old had the grip and was suffering severely from headache and the other symptoms. Her temperature was 104° F. when I first saw her. I left her with aconitine (Abbott), for the fever. I also prescribed the usual "shake-up" of podophyllin, 1-6 grain, and calomel, 1-6 grain, 6 of the granules to be taken one each hour, to be followed by the solution of sodium hyposulphite, as in the previous case. In addition, I gave at once an injection of the subcutaneous lobelia. Next day I found a convalescing patient.

I might go on multiplying cases of grip, with results from lobelia like the above, but in some cases the results were not so brilliant.

In the cases of my wife and of myself, while we were much relieved, we were left with a cough of a catarrhal nature which neither the lobelia, spray or many other medicines tried touched. At last, though, we got relief from a mixture of dilute nitric acid, 1½ drams, and water, 8 ounces; of which a small swallow was taken as often as the cough would bother. The cough was gone in from twenty-four to forty-eight hours.

Case 4. This is a case of diphtheria, wipings from throat, after culture, having showed a superabundance of the freckled bars. Diphtheria-antitoxin was used, and made good. However, we had to use heroic doses. The patient was a 3-year-old child. After the first danger was passed, we did not care to whip up his antitoxin-making powers any more, while we still were confronted with a symptom-complex showing very-much weakened powers of resistance; so I resorted to my subcutaneous lobelia again, giving, hypodermically, 15 minims every morning and evening—and it would have done your heart good to have seen that "kid" come through. In thirty-six hours, I had a convalescent patient and had given only four doses of lobelia. Prescribing some more podophyllin and calomel for the bowels, and echinacea, for its antiseptic effect, I found that the patient soon was up and out.

Now, just about the time I felt it safe to take a good, long breath, the father, who was weakened by his constant vigil caring for the baby, complained of a sore throat, and inspection disclosed a mem-

brane on the pharynx, with top edge, only, in sight. Snap diagnosis, diphtheria.

Antitoxin was not to hand and delay was dangerous; so, I drew 45 minims of subcutaneous lobelia into my Luer syringe and injected that. That was all. Next morning, when I called, the man told me that shortly after I left he vomited and ejected a "slug" (as he called it) about the size of his little finger, one end being pale-yellow, the middle was white, and the other end was bloody. I gave the usual calomel-podophyllin and hyposulphite clean-out, and no more trouble was experienced.

So, from my clinical observations, I believe that in lobelia, we have a medicine possessing antitoxic powers, and one that is a mighty good equalizer of the circulation. And, while atropine will dip down and relieve internal congestions, it unfortunately tends to dry some of the secretions. On the other hand, lobelia also dispels congestion, but, its tendency is, to stimulate the secretions. This makes it a very potent factor for good and gives it a wide range of usefulness.

W. K. JOHNSON.

Ft. Scott, Kans.

[We fondly believe that lobelia is bound to come into its own. That it is truly a great remedy, there is accumulating evidence. It is a powerful antispasmodic, and it seems probable that its therapeutic virtues rest mainly upon that fact. It should be given hypodermatically in order to secure the maximum of physiological action with a minimum of gastric discomfort. The best form is that of the alkaloidal hypodermic tablets of lobeline sulphate, the dose of which is from 1/400 to 1/200 of a grain.—Ed.]

IODINE IN GOITER

Your editorial on the deleterious action of iodine in goiter prompts me to submit the explanation that this action is due simply to faulty elimination, both through the bowels and the kidneys. If the bowels get a preliminary thorough cleanout and are then kept clinically aseptic, giving a morning dose of salithia, enough to keep both bowels and kidneys active, no ill results ever will follow iodine medication. I have given iodine in some form in 350 cases of goiter, always beginning with a minimum dose, then increasing to the

maximum, and not one subject ever exhibited any signs of untoward effects of the iodine.

W. A. MARNER.

Miles, Iowa.

one else who may have an equally valuable remedy for this or some equally common complaint.

F. J. KALAL.

Clarkson, Nebr.

A SURE CURE FOR OFFENSIVE FEET

Here is a sure cure for stinking feet, and my suggestion to you, doctor, is, that you make a note of this, lest you forget in which number of *CLINICAL MEDICINE* you saw it.

Once upon a time, there was a man who was suffering from bromidrosis of the feet for years, the trouble having started during his college-days. His feet "smelled to heaven," making it necessary for him to refuse many an invitation to a fine Sunday dinner. He had tried "everything" down the list of "sure-thing" cures, once even having stood in pure hydrochloric acid—although a week later he walked out of slippers made of his own pedal cuticle. Yet, still he had to refuse those Sunday dinners. This same sufferer now offers you a "sure cure."

Doctor, tell your patient to wash his feet with soap and water, and see him do it in your own office. The feet should be well dried and the nails carefully cleaned and trimmed; and, while he is going through this cleanup stunt, you dust into his shoes generously of the proprietary known as camphophenique. When the feet are clean and dry, sponge them with pure alcohol, then, when this has evaporated, apply some liquid campho-phenique and rub it in well, especially under toe-nails. Five or six drops of the liquid is sufficient for one foot; still, more will do no harm. After this application, dust the whole foot with powdered camphophenique, rubbing it well between the toes. Now fresh clean socks are to be put on, while the old ones are burned. Tell the patient not to wash his feet for four days. When at the end of that time he calls at your office, repeat the same treatment. Three or four times will cure the worst case of bromidrosis; in most instances, however, the first one does the work.

Remember this, doctor: Your own feet may need to be treated thus. And, do not be afraid to try.

Bromidrosis is a very distressing affliction, and I should like to hear from some-

[It must not be lost sight of that bromidrosis of the feet is not a localized affection so much as a symptom of a general systemic condition that requires relief; this despite the fact that the symptom is sharply localized, very expressive and distressing. While the treatment outlined by Doctor Kalal undoubtedly will give results, these will be enhanced by a course of intestinal antiseptics (the combined sulphocarbolates), while a powder containing sulphocarbolates—for instance, the dusting powder on the market known as dermal antiseptic and astringent—also is of value. The present writer believes that the symptom of "stinking feet" may be more evident—or less so—according to one's habitual diet, and also in proportion to the efficiency and thoroughness of a course of elimination. This would be a point worth experimentation. Persons who are afflicted in this manner might render us great assistance by ascertaining whether the bromidrosis becomes less when they limit themselves to a vegetable diet; or, also, when a course of alkaline treatment is undertaken, as, for instance, one daily dose of a heaping teaspoonful of the light magnesium oxide, washed down with a tumblerful of water. We hope that somebody who is subject to this distressing condition will experiment in this direction and will report on what he has discovered.—Ed.]

AS TO OUR OSTEOPATHIC BROTHER

A previous article from my typewriter, discussing Osteopaths (April, p. 308), served to provoke considerable criticism. This was partly my fault. I should have written in terms that the simpliminded could understand more readily, and not have mixed ridicule with truth, humor with wisdom. Some minds can not differentiate.

Of course, the truth comes so very near to the line of offense to the subject discussed that it is but "a step from the sublime to the ridiculous." For instance, the osteopathic brother who "loosens up" everything upon which he can lay his hands, in an acute case of poliomyelitis, with the

primary object of indirectly making a pocketbook fly open, does not treat such a case according to my ideas of helping nature overcome the pathological conditions. In such a case, it is self-evident that the best thing the regular physician can do is, to withdraw his unappreciated services; for, the patient will, in all probability, not survive the osteopathic treatment very long, and the "regular" will not be needed. If fate decrees that an inevitable end is at hand, what can be wrong in allowing the kindhearted osteopathic brother to "be in" as an assistant at the termination? Why should I "kick" when the patient will never think of doing so, even in the dim and dismal future?

With all humbleness and deep contrition, I desire to withdraw any words of mine that may have given offense to my friends, the O. brothers or the C. brothers.

A. D. HARD.

Marshall, Minn.

AUTOINTOXICATION, AND ITS TREATMENT

Every intelligent physician knows that the intestinal tract is responsible for the greater part of all autointoxications, although some there are that arise from faulty elimination of tissue waste. Doctor Jamison, of New York, calls intestinal autointoxication a "protean monster, with an endless train of ills that follow in its wake." That definition is so near the whole truth that I think the Doctor must have been inspired when he wrote it. Prominent among these numberless ills are: rheumatism, gout, neuritis, neuralgia, headache, nervous prostration, chronic nephritis and diabetes. Indeed, I might say that all diseases, except those coming from without the body (such as the contagious ones), are here included.

As the object of this paper is, to discuss the treatment of autointoxication rather than its cause and effects, I will confine myself to my personal experience with autointoxication and tell how I treated myself.

In January of 1916, I had a severe attack of neuritis of the left shoulder and upper left arm. For the first few weeks, I did nothing for it, hoping that it would pass away spontaneously. Instead of that, I grew worse steadily. I was treated with

the electric spark from a large coil-machine, taking daily treatments for several weeks, but without benefit. Then I consulted a good practitioner of medicine, who prescribed, gelsemium, iron, strychnine, quinine, and sulphocarbolate of sodium for the condition.

After trying these drugs for about four weeks, but, realizing that I grew no better, I wrote to a Chicago physician and asked him whether he kindly would suggest a course of treatment. In his reply, he expressed his regret at my condition, inasmuch as he knew of nothing that would do any good in neuritis.

Then I bitterly thought as Job said to his comforter, "Ye are all physicians of no value." I also thought of the biblical injunction, "Physician, heal thyself." Thereupon I got busy on the job.

My neuritis had progressed so that I could not extend my arm more than a few inches at right angles to my body, nor could I in any wise raise it upward and backward. My wife had to assist me in dressing, while I was in pain nearly all the time. My face looked very pallid, and it had been thus for several years. I was suffering from chronic bronchitis, which strongly suggested tuberculosis. I had frequent attacks of intercostal neuralgia; also nervous attacks, that would come on suddenly and last for several hours, accompanied by heart palpitation and profuse sweats.

I suspected that autointoxication was the cause of all my ailments and set about to seek a remedy for it. I thought of a number of good intestinal antiseptics, none of which, though, had ever been used by me with entire success. That I believed to be owing to the fact that these drugs were absorbed by the stomach and reached the bowels only through the circulation of the blood, thereby exerting only a feeble influence upon the foul feces that constantly were being absorbed into the general circulation.

For several days, I racked my brain to find some way to get my antiseptic in direct mechanical contact with the contents of the bowels. Then the thought occurred to me that "Russian oil" would not be acted upon by the gastric nor by the intestinal digestion, and thus would constitute the coveted vehicle for my antiseptics. Thereupon I formulated the following

prescription, in which all the medicaments are held in perfect suspension:

Creosote	dr. 3
Carbolic acid	dr. 1
Oil of turpentine	dr. 4
Oil of Cloves	dr. 4
Oil of cinnamon	dr. 2
Menthol (dissolved in alcohol)	grs. 30
Liquid petrolatum, Russian	ozs. 32

Label: Shake well, and take 1 tablespoonful three times a day, followed by a brisk saline purge each morning.

I took 3 spoonfuls a day for only about one week. I then reduced the dose to 2 spoonfuls a day for a week, and then to 1 spoonful a day, to the end of the course—five months. After the first three weeks of treatment, I dropped the saline purge to twice a week.

The result of this treatment simply was marvellous. Three weeks from the beginning of treatment, I had very little pain in my arm and shoulder and was rapidly regaining the use of both. The improvement was steady to the end, and I not only was cured of my neuritis, but, all the other ailments enumerated above. My general health at this time is as good, seemingly, as it was at any time in my life, and my complexion is as rosy as it was in my youth. In looking for a silver mine, I discovered gold.

I should be pleased to have every reader of THE CLINIC give this treatment for autointoxication a fair trial and report his results to the medical profession at large in this journal.

G. N. MURPHY,

Paducah, Ky.

THERE IS REASON TO HOPE

The other night I sat in a county medical society and listened to the reading of a paper on "errors in diagnosis" by a doctor who had been in active general practice for a good many years and had had opportunity to see cases of virtually every disease peculiar to the localities in which he had practiced. This man did not spare himself, but, admitted that he had made errors, and some of them even within the preceding month. He showed us how easy it is to be wrong and how hard, at times, it is to be right. The paper was followed by a general discussion of a nature different from those usual in medical bodies, in that vir-

tually every one who spoke admitted that he himself had not invariably been successful either in diagnosis or treatment.

But, the most wonderful thing was the expression of a pathologist, a man who has not been in active practice for years, who, however, has been giving all his attention to problems of pathology, hygiene, sanitation, and public health. In substance, he said that it was his belief that the average doctor, and more especially the younger men, *did not give sufficient attention to the patient under treatment*. That it was his opinion that, in the endeavor invariably to formulate a correct diagnosis, the indications for proper remedies, which might bring relief, were overlooked.

He then went on to say that, regardless of a perfected diagnosis, he believed that a physician might do much for his patient if he met the conditions present, postponing arrival, as nearly as possible, of a name for the condition, to a later time. He said that this might sound queer, coming from a man who was not in general practice, one who was not treating the sick directly; still, he had noticed that those who had called upon him for laboratory assistance and who at the same time did something for the relief of their patients seemed to get better results than did those who waited for his decision before applying therapeutic measures. He admitted that we should make our diagnosis—and a true one—still, knowing the name of the condition and all about it, we also should know how best to meet the indications present, and with the appropriate remedies.

The wonderful part of this is, that it comes from a man who is not directly treating the sick; a man, moreover, who, we might imagine, would place all else aside and depend upon a diagnosis prior to the institution of any sort of treatment. His insistence upon the personal equation in the patient himself appealed to me, for, I had, year in and year out for more than a decade, been likewise insistent, and had been ridiculed for that. However, nothing of the sort followed his assertion now, and more wonders followed, for, every man who spoke after him agreed with him to the letter.

In his remarks, the speaker suggested that therapeutic agents of every description were worth while, if they were employed as indicated. And then another

wonderful thing occurred—not a one present disputed that assertion.

In citing one case in which an error had been made in diagnosis, the speaker said that he had found the patient to be the victim of autointoxication, with high acidity and much indican in the urine. The woman had been treated for something entirely different. That was not remarkable, but, the wonderful thing was that, having told that he treated the patient with intestinal antiseptics and alkalis, no one found fault with the treatment or argued that the intestinal antiseptics, in particular, were worthless. Quite the reverse, for, some of those who discussed the paper admitted that in like cases they had used those remedies with invariably good results. That, figuratively, took me off my feet, as I had expected the doctor to come in for a generous amount of ridicule; for, you all full well know that the intestinal antiseptics are “no good” and have so been classed by our peers.

Another wonderful thing was that there was such a general agreement that drugs were not altogether worthless and that even some of those on the taboo list were really worthy of our attention, and that, if properly employed in accordance with the indications, many drugs pronounced “no good” would yield astonishing results.

So far as memory serves me, this was the most wonderful medical meeting I ever had the pleasure of attending, for, it was so replete with happenings out of the ordinary: Admissions of errors and unsatisfactory results on the part of those who had previously reported only successes. No fault found with therapeutic agents which had been considered “no good” by those who would censor our every action. Admissions that the patient was too frequently overlooked and left to suffer, in order that we might perfect our diagnosis. Insistence that the patient, and not the disease, should be the target at which we should shoot in our endeavor to restore the normal.

As a whole, it was a meeting that gave those in attendance more real food for thought than will any dozen of the ordinary sort, where every man speaking tells of his successes and not of his failures. It was just the sort of thing that every society should have at least once during the year, if not oftener, as it was of the kind

that set every man to thinking, and asking: Have I given close enough attention, not alone to the diagnosis, but also to the treatment? Have I looked into the *little* things with sufficient closeness? Have I studied the indications for my remedies and applied them as correctly as possible in every instance?

Reno, Nev.

GEORGE L. SERVOS.

[We have never been able to bring ourselves to accept the assertion of Madame Mantallini's husband, that the world is going to the demnition bow-wows. In fact, we are quite sure that it is a pretty good old world, and we refuse to believe that the very best thinkers and authorities are entirely devoid of sense. The ridicule that was heaped upon therapeutic intestinal antiseptics some years ago was merely an episode, and we who accepted this idea, acted upon it, and saw our patients benefit from it were content to endure the ridicule so long as we got therapeutic results. In the end, the other fellows were bound to come to our way of thinking, not because it was *our* way, but, because its truth can now be demonstrated “scientifically”; which, of course, puts another face upon the matter. Nevertheless, the approval of our shining lights in matters which we have fought for all these years is very pleasing.—Ed.]

TOBACCO NOT GOOD FOR SOLDIERS

Without desiring to enter into any extended discussion of the merits or disadvantages of the use of tobacco, I wish to comment a little upon the argument that is now being so generally put forth in its favor by its friends, and also probably by those interested in its sales; namely, its comforting and soothing effect upon the nerves, especially of our soldier boys.

Now, I readily admit that tobacco does have this effect; but, so have alcohol, opium, cannabis, and other narcotics when taken in suitable doses. Still, despite this pleasing effect, the use of all the latter drugs is considered dangerous and reprehensible by all rightminded people in our time. We all know that none of these drugs adds an atom to the user's strength of mind or body, but, simply deadens the sense of pain and weariness until its effect has passed off, leaving the user in worse

condition than if he had not resorted to the dope.

I am well aware that overwrought nerves and muscles call loudly for something to soothe and relieve; but, would it not always be better in civil and in military life to furnish something that will supply real strength and rest, instead of mere poisonous dope? I strongly suspect that this argument in favor of tobacco is advanced not altogether by lovers of the weed (many of whom admit its harmfulness), but, largely by the big companies who are interested in its exploitation.

W. H. HARWOOD.

Malone, N. Y.

[Whatever may be one's little pet objection to tobacco, the present hardly is a suitable time to enforce it, at least with reference to the soldiers in training, and, even more, to those in the field. The evidence is ample and conclusive that a smoke will relieve nerve tension in the soldiers who are on duty in the trenches as well as in those who come to the ambulance wounded—better than anything else. We are then dealing

tions—on the ground that tobacco is harmful or for some other reason—have been very few. The attitude of the Y. M. C. A. is particularly to be commended in that it has decided to supply even cigarettes as cordially and as wholeheartedly as it supplies cups of hot coffee and other comforts.

Our critic asserts that it would be better to furnish something that will supply real strength and rest instead of mere poisonous dope. If he can suggest something that will fill the bill as well in a particular case as does a smoke he will be deserving of great credit. To place under suspicion the manufacturers of and dealers in smoking material is, under the present circumstances, hardly permissible, and, this writer holds, not merited. . . . After all, we are but human. We must meet conditions as best we can, and we must deal with the material that we have, human or otherwise, according to its nature.—ED.]

GOAT'S MILK FOR INFANT FEEDING

I am glad to see your editorial in the October issue on the value of goat's milk



with abnormal conditions which require artificial aids. The smoking of a cigarette, or of a pipe for that matter, under such circumstances is as legitimate as is the hypodermic injection of morphine and atropine before and after operation that is given in order to prevent or lessen nerve-shock.

It speaks well for the good sense of the people that the movement by several newspapers to raise funds to supply the soldiers with good American smoke-material has found such a general and generous response. Also, it is a good sign that objec-

tions for infant feeding, because, for the last ten years, I have been urging its use, through my daily "health-hints" in the newspapers as well as in *Health Magazine*.

Aside from the fact that tuberculosis is very rare in goats, they being the healthiest of all animals, goat's milk is much more easily digested than cow's milk, since the fat in the former is in a state of very fine emulsification and not readily separable, as compared with that of cow's milk, especially that of the Jerseys. Moreover, it does not form the large, tough, indigesti-

ble curds that are the cause of so much trouble where cow's milk is fed.

I am sending you photographs of a case "before and after taking" goat's milk, which tell the story better than words. This child's life was despaired of, until, upon my advice, a goat was procured. The past spring I needed one in my own family, but, was unable to get one even by the most careful search; so, I have induced an Ozark farmer to raise milk-goats in this "Switzerland of America," and I write this so that doctors who appreciate the goat as a wet-nurse may know where to find one, after a while, at a reasonable price.

THOS. J. ALLEN.

Eureka Springs, Ark.

THE LABORATORIES OF COOK COUNTY HOSPITAL

In view of the proposed erection of new laboratory-buildings to be built for the Cook County Hospital, Chicago (at a cost of \$1,000,000), a few words regarding the work being done in this institution may be of interest just now.

The report of the Cook County Hospital for the last year shows that almost 31,000 patients were treated in the general hospital and that 3,500, on their way to state hospitals, were admitted to the psychopathic wards. The average number of patients is almost 2,000 each day. During the year 1916, 7,700 surgical operations were performed. The average number of employees is 550, while the number of internes and attending physicians who serve the county without pay is 68 and 96, respectively. The average daily expense per patient was \$1.54. During the year, the total number of deaths was 4,000.

At the present time, the county is supporting a large number of laboratories, and these are scattered about the city and all of them occupy rooms designed for other purposes. There is also a laboratory at the tuberculosis hospital at Oak Forest.

During the past two years, a large amount of work has been done by the laboratory-workers of the county, and this has been fruitful in diminishing the number of sick persons, as also in the actual demonstration of the cause and the cure of at least one disease, namely, infantile paralysis. There are at the present time

300 patients in the County Hospital having this disease, and the death rate this year, as compared with the death rate last year, is as 55 percent to 11 percent.

During the year 1916, nearly 11,000 tissue examinations and blood tests and 511 postmortem examinations were made in the pathological laboratory, and this work is constantly growing in importance and volume. In a large percentage of cases, a laboratory examination is essential for the diagnosis—satisfactory medical service can not be given without such. These examinations enable the physician to vouchsafe the patient more efficient treatment and to restore him more speedily to health. The laboratory makes it possible to save the county thousands of dollars in reducing the time that patients are kept there.

It is the expectation of those who have done this work that, with the extension of the laboratories, other equally fatal diseases will be rendered harmless and that thus the service of the County Hospital will not be required in proportion to the expected increase in population.

BAYARD HOLMES.

Chicago, Ill.

[Doctor Holmes, who is director of the laboratory of the Psychopathic Hospital, for some years has devoted his undivided and wholehearted efforts to the study of psychopathic maladies, more especially dementia præcox. His description of the important laboratory-work done under the auspices of the Cook County Hospital, not only is of great interest in itself, in showing what an immense power for good an institution of this kind can be, but it should also stimulate men toward greater efforts in the field of those healing-activities that are susceptible to close study in a properly equipped laboratory. It is to be hoped that many and varied laboratories soon will be established all over the country.—ED.]

INDUSTRIAL HOSPITALS

It no longer is a novel experience to find that business concerns, factories, and commercial firms in general maintain dispensaries or hospitals under the charge of competent physicians and nurses, but, has come to be accepted, not only as a provision

tending to diminish the morbidity rate among employees, certainly to their great advantage, but, also to the ultimate benefit of the employers themselves. Indeed, present periodical medical literature is replete with essays dealing with this subject, and many splendid institutions of this nature are being described in these articles.

However, it is doubtful whether any private concern, anywhere in the world, maintains as fine a chain of hospitals as does the United Fruit Company, of Boston, the hospitals of which are established in the American tropics; indeed, few governments have equalled or even approximated this work in their colonial dependencies. The hospitals referred to are features of a great sanitation work undertaken by the Company, in its medical divisions, in Panama, Costa Rica, Guatemala, Colombia, Honduras, and Cuba; these divisions including fourteen hospitals and thirty-four medical dispensaries or stations.

The *Southern Hospital Record* for August last pictures two of the largest of the hospitals, namely, those at Port Limon, Costa Rica, and at Quirigua, Guatemala. The sanitation and hospital-work of Port Limon, we are told, has been in operation many years, and has been so successful that that city has not been visited by plague or yellow-fever for fully ten years, while twenty years ago there occurred eighty deaths from yellow-fever and plague among the Americans in the course of one year. The mortality among the Negroes was even greater, and also among the Spanish and Ladinos there were many deaths.

The hospitals of the United Fruit Company are operated in connection with a far-reaching and well-organized system of drainage, pure-water supply, general sanitation, and quarantine.

The hospital at Quirigua is a concrete structure built four or five years ago. It is situated on raised ground in the center of a district, but, comprising much low and swampy land. The building is ideal in its construction for use in the tropics, is effectively screened against mosquitoes, and is rat-proof. The main portion consists of three parallel wings connected on the upper and on the lower floors by screened corridors, thus permitting isolation and quarantining should occasion require. The rear wing is considerably removed from

the main wing, with which it is also connected by long upper and lower screened corridors. Here are located the commissariat, the kitchen, the laundry, and, at the extreme rear, the operating-room, modernly outfitted and provided with a shaded white light from above.

In all of the Company's hospitals, the laundry is operated in connection with the institution—a feature that permits sterilizing of all body-linen, bed-linen, night-gowns, washable wearing-apparel, and everything of that category brought ashore from the steamers. Special sterilizing-apparatus are, of course, indispensable in all operating-rooms. All bed-clothing, towels, etcetera, after issuing from the laundry, are kept sterile, in charge of one of the nurses, until intended for use. A low commercial laundry rate is made to the Company's employees.

The initial expense of establishing the hospitals and sanitation-equipments, drainage, etcetera, was several millions of dollars. The running expenditure in maintaining the work calls for an outlay of several hundred thousand dollars annually. In 1915, the Company treated, in its medical division, 116,000 patients, this including the number treated in hospitals, on steamships, and in dispensaries.

The maintenance of efficiency has called for an extensive patrol to locate sources of disease, and to prevent it, so far as possible, from spreading. It thus is possible to maintain a degree of segregation and isolation against infected localities that are sources for the dissemination of disease. Vigilance is required in the cases of sick natives in outlying districts that, through ignorance, indifference or apathy, may not be promptly reported. However, the organization is such that it is almost impossible for a man to be taken ill without receiving prompt medical attention, since his case will be reported even if he is unable to do so himself.

The influence of the hospitals is far-reaching. Patients from the Panama Canal Zone are treated at the Port Limon hospital, those from neighboring republics, in the one at Quirigua. The small sum of 2 percent of their earnings is deducted from the wages of employees for their annual medical treatment and care. Native patients are now treated for hook-

worm and similar afflictions. In the Company's hospital at Santa Marta, Colombia, it was found that 95 percent of the patients were afflicted with hookworm. It is usual that the patient who, in addition, has suffered from some other illness or infirmity leaves the hospital feeling better than he has for years.

WHY THE BRAIN HAS NOTHING TO DO WITH THINKING

You, no doubt, are a favorite doctor. You even may be so fortunate as to be connected with hospitals and medical schools, where two or more "heads are better than one." Perchance you have clients of the happy few who consult an expert at twenty-five dollars a visit. They come to you and you tell them seven seas of symptoms. You smile upon them smoothly and patronizingly and full of "professional dignity," tell them that "there is nothing organically wrong" with them, collect your semi-annual interest on a 5-percent bond, and with a pleasant "Do not worry, it's only up here," touch your forehead and bid your patients good-day.

Nearly every one of the medical men you know (present company excepted) is convinced, and teaches, that your thoughts are in your brains. He is firmly convinced that the "mind" is in the brain. It is the "brain and nervous system"—if you hear him lecture, read his ancient though newly written books—which thinks, feels, perceives, discriminates, freely chooses, pays attention, desires, suffers pain, has memory, reasons, has intelligence.

However, this is, absolutely, not proven, many medical men, physicians, surgeons, and clinical professors to the contrary notwithstanding. The brain and nerves, gray matter and white cords have as much to do with all of the numerous mental activities as have the white blood-corpuscles in your arteries and veins or the elastic fabric of your muscles. These have as little, and as great, power to perceive, remember, discriminate as have the brain and spinal cord.

This is no mere vagary, no freak opinion, no sensational assertion, as backward-looking medical men unanimously will declare. The proof is written in records of extensive experiments made by competent scientists.

Obviously, the dispersal of this entrenched fallacy among medical men did not

come from medical societies. It usually requires a nonmedical research-worker, such as a Pasteur, a Curle, a Ramsay, an Ehrlich, a Watson, a Dunlap, a Jennings, a Mast—all chemists, zoologists, experimenters unshackled by the bigotries and jealousies, petty prejudices and narrow restrictions of medicine—to rid psychology once for all of the brain-mind dualism.

The experiments which prove, beyond the denial of physicians, "authorities," "experts," and others, that all the elements of mental life can be evoked without the brain, in spite of the brain, and may be absent when the brain is perfectly healthy and uninjured, have come from the laboratories and observations of such investigators as Professors H. S. Jennings, S. O. Mast, not to mention many others.

Suffice at this time to say that experiments are now available that demonstrate that white blood-corpuscles, units of heart-tissue, muscle-fibers, and eye structures perceive—or sense—light, electricity, chemicals, touch, cold, heat, bacteria, poisons, and different colors.

Moreover, these fragments of human textures, kept alive in the way Dr. Alexis Carrel does or as Professor Jennings keeps alive the little slipper-shaped animalcule called the paramecium, will discriminate between acids and alkalis, between grains of sand and granules of starch.

Mark you, there are no nerves or gray matter or so-called "ganglion-cells"—the latter a term used by physiologists, when in a pinch, to explain memory and choice in animalcules and worms. There are only bits of living muscle, flesh, blood-corpuscles, and heart, growing artificially disconnected from their living anatomical source.

These fragments of the living man choose things that aid their growth and comfort, and reject those which do not. True enough, there is no perfection of choice. Like the whole man, they do not always do what they "ought" to do; still, on the whole, the white blood-corpuscle chooses incorrectly less often than do the descendants of Eve and Adam.

More startling to relate, is the fact that the tissues alive and separated from the rest of the anatomy do pay attention. In other words, they devote exclusive efforts to one thing when several other things are striving for their response. Like a dog with

a bone or a man at a movie, nothing outside will distract them.

The states of feeling, emotions, appetites, passions, and desires are all exhibited. A white blood-corpuscule exhibits hunger, fatigue, satiation, sleepiness, pertinacity in the pursuit of food, capriciousness, such as preference, sometimes for beverages at others for a vegetal or, again, for an animal food.

Muscle, eye, tongue, heart-fibers, and blood-corpuscles manifest both pleasure and pain. Even the emotion of fear and self-defense is plainly visible under the microscope. This is shown experimentally by threatening influences that do not injure or approach these living particles. They often are thrown into a "state of fear."

Foresight, anticipation, hope, prudence can be observed and studied in the white blood-corpuscule as it moves, crawls or flows into the little folds of itself called "pseudopods," or false feet. Obstacles and solid objects, not food, planted in its way are, evidently, "sized up" by these "inner men."

As for memory, this is so definitely discernible that the behavior of the structures, such as the white corpuscule, can be shown to learn tricks, according to the punishment and reward it receives. The influences necessary to cause them to make a certain movement becomes easier and easier at each repetition, and it finally becomes spontaneous, without requiring the stimulus. Associative memory, thus, is present in pieces of sense-organs, muscles, heart, stomach, and some of the blood.

Thus, there is no difference between the man as a whole and living parts of himself. True enough, deep philosophic dialectics, logical reasoning, and free will have not been credited to the white blood-corpuscule or the muscle fiber. Neither, though, have these functions been bestowed upon the spinal cord, the medulla oblongata, and the brain.

L. K. HIRSHBERG,

Baltimore, Md.

THE EVILS OF WHISKY

Many years ago, when I still was a young man practicing medicine in a small village among the hills of northern Mississippi, I was sitting in my office one lonesome spring evening. I was single at the

time and have not multiplied to any extent since then. Business was dull. I presume the grass was green as usual and the violets—well I was not on the lookout for them. The birds probably were singing, but, not being of a Robert Burns or Walter Scott turn of mind, I did not hear them. But, the voice of the turtle-dove was heard in the land, and I felt quite sure that the thoughts of the young man were liable to turn to thoughts of love at any moment.

I was feeling "larapin." My education was very limited. I knew scarcely any latin, but used freely the little I knew. When asked on the street how I felt, I would say, "Fino larapino," and explain it as feeling larapin fine, and was considered a Latin scholar, hide and hoofs.

Still with all my success, I was not satisfied. There was something wanting. There was a sprightly young widow in town I had seen a time or so during my stay in the village. The harder I would study anatomy and practical medicine, the more my mind would run in channels like this:

There's nothing in this world so fair
As the one I've seen with the darksome hair,
Her cheeks were soft, her eyes were bright,
Her pretty smile was my heart's delight.

Oft I had seen her down the street,
But, away too far, for me to greet,
I lived on hope; and then I'd pray
Perhaps some time I'd have my day.

It was while I was thus musing and meditating that there was a rustling at the door, and in stepped this same sprightly raven-haired, black-eyed beauty, the heretofore idol of my heart and dream. I offered her a chair. My brain at once sent a secret wireless telegram to my heart and said: "Carambus! Veto. Presto agrimento Rats to your holes—business is getting better." I took a good look at her and decided, with Queen Sheba, that the half had not been told me.

Then we proceeded to discuss the incidents and topics of the town, from the time Bill Smith had his leg broken unto the day Ann Hester ran away and married her cousin Bob. She wanted a little medicine for a trivial ailment, and I gave it to her. Then, after so long a time, I said:

"Your visit reminds me of an anecdote—a tale I have never forgotten."

And she: "What is it? Tell it to me."

Whereupon I threw my tobacco windward and cleared my laryngopharyngeal

mucous membrane of cobwebs and other streptococci-infections, and, regaling the malpighian tufts of my stomach with a drink of pure soft water that came from the same mountain where pure "mountain-dew" was manufactured, I proceeded as follows, to wit:

"Once upon a time in the good old antebellum days (which means, before the war, says I), nearly everybody drank whisky. At that time, whisky was pure and cheap, yet, the people did not, as a rule, drink to excess or get drunk. It was during those good old days that the governor of North Carolina, a toddy-drinker, decided to pay a visit to the governor of South Carolina, a bone dry democrat, and leading performer on the water-wagon. After the North Carolina governor had seen the city, people, capitol, and other things, he was sitting in the mansion-house with the other governor, when he asked him how he liked things down his way. The North Carolina governor replied: "Lar-rapin, governor, simply larrapin, immense and melodious—only one thing wanting, governor. It's a long time between drinks."

Now, to complete the application of my story, I said: "I am very glad, indeed, that you have called upon me, but, it does seem a long time between visits."

Whereupon the sprightly young widow, the heretofore idol of my heart and dream, arose from her seat—pale as a corpse—smashed the bottle of medicine against the stone, producing an odoriferous breeze resembling the fumes of Vesuvius combined with the fluid extract of *vilurnum prunifolium*.

"Insult a lady in your own office" said she. "What do I care about your whisky-drinking governor of North Carolina, you punch-guzzling, whisky-drinking, raw-headed son of a tadpole."

"Beg your pardon, madam," said I. "Excuse me, I was only attempting to illustrate—to get you to appreciate."

"Illustrate a dog's foot, appreciate the deuce. What do I care for the Governor of North Carolina and his infamous whisky-drinking."

"But, listen, please," said I. "You do not understand!"

"Get out of town," she said, "you red-headed, long-nosed, pop-eyed, wart-tided, tobacco-toothed, hamper-jawed, elephant-

eared, knock-kneed, bander-shanked, molly-waddled, whoopie-diddled, whisky-drinking, doc-a-doodle of a doc. Get!"

I have never married. Who's to blame? Damfnodoyou?"

"DR. CARAMBUS."

— Texas.

NEED OF VITAL STATISTICS

There can be no question as to the great importance of having a complete and accurate record of each individual's birth, full name, and final demise. This information should be in the hands of the state, for any proper purpose when needed. It would also be of great advantage to the government if each individual were followed through life by further recorded information for specified periods concerning his occupation, any criminal history, and even his social integrity.

Still, statistics of this kind are of no value whatever if they are not authentic and complete. A system that permits a part of the births to go unrecorded scarcely is worth the trouble and expense of maintaining.

The present systems, as spasmodically and but partly enforced in the different states that lay claim to having records, merely are weak efforts directed toward a worthy end; from the standpoint of efficiency, all of them are failures. Minnesota has as good a system as any state in the Union, yet, large numbers of births and deaths continually escape from proper registration.

The fault for this inaccuracy lies in the plan of securing the information desired. The law was framed by men who thought that all that was necessary was, to make a law. The practical effects of the law were not foreseen nor carefully studied. Merely to command, with a penalty attached for not obeying, may secure wished-for results in some rare instances; but, to secure complete vital statistics, this method of obtaining universal cooperation, without which the records will, necessarily, be incomplete, is futile.

I am aware, of course, that a critic must be able to meet the question, "Can you furnish a better?"

As to this, it only is necessary to indicate the flaws in order for even a novice to avoid them. I will, therefore, point out a

few of the laws in the Minnesota laws and procedures that render vital statistics in that state a practical failure, if accurate and complete records are the objective. The responsibility for a birth report is divided up between the physician in attendance at the confinement (if there be such physician), the mother, the father, the midwife or some relative. In cases where no physician attends, while the father is absent from home and kindly neighbor women officiate, the mother can not be expected to get up from her bed inside of the legal ten days and secure from somewhere a blank report, correctly fill it in, and then transmit it to some obscure township-clerk in some faroff farm-house. And they don't.

In common cases in which a physician is attending, it is almost impossible for the latter to secure the name to be given for the child. But, without the name, what value can be attached to a report? A report might be made later on by the physician, if he can find out when the baby has been named, and he has plenty of leisure to make a visit (it may be ten miles away) to get the information wanted. And the doctors don't.

After a report is carefully made out and the physician has spent his own money to defray the expense, he may possibly send it to the clerk of the proper township. And the genius of a clerk may deposit these important papers, along with the usual farm-papers, in some old box under the bed, there to serve gay mice as welcomed material for nesting-purposes. If, perchance, the clerk does not forget the paper and it is not lost, the report, as a rule, will reach its destination at the state capital. But, the town-clerks do not all do as they should.

If the physician considers that the law imposes an unreasonable burden upon him, without just recompense, he may tell the parents to get a blank from the township-clerk and report the birth at their convenience. However, very often they do not do as they are requested to do.

If the physician makes a mistake and sends the report to the wrong township-clerk or to a wrong address, the report never may reach the state capital, although he may have tried to do his full duty.

If a report is lost in the mails, there is no way of knowing that a duplicate report

should be sent; nor is there a way to secure the information without a considerable sacrifice of time and expense.

There are other loopholes through which the law is made ineffective and the statistics incomplete; however, these examples will show that a quite large percentage of the statistics called for never is secured by the authorities of Minnesota.

I have no doubt that the conditions in other states are equally faulty with regard to completeness, and the information that should be valuable is thereby rendered uncertain and scant.

What we require is, complete national statistics, based upon some plan that will meet the requirements. And, while such statistics are being secured, we should possess other information concerning every individual that would be of great value.

If the information covered by proper vital statistics is of great value, the expense of securing this material should be borne by those who are benefited by it. To place all the burden upon physicians, is a violation of constitutional rights, and is unjust. Merely to say that it is a public duty, is not satisfactory, nor does it meet the issue. It is a public duty for all to bear, not by one class alone.

While this feeling exists among physicians—and it can not be otherwise than common—there can be no cheerful cooperation to secure complete reports.

An effective law must take into consideration the evident fact that, to be productive of complete records, it must be made to close practically all loopholes for error to slip in. Our present vital-statistic laws do not meet these requirements; consequently the result is, records of very little value, from any point of view.

A. D. HARD.

Marshall, Minn.

THE FOREIGN-BORN AMERICAN

There is a peculiar contradiction and inconsistency in the custom and habits of those citizens of this great country who have chosen it for the land of their adoption, have sworn allegiance to its constitution, its institutions and customs, and promised to uphold and defend it against every enemy, even though it should be the country of their birth. No matter whether these naturalized citizens hail from France,

Scandinavia, Germany, Russia, Switzerland, or whatever country, there is always a tendency to retain some of the characteristics of the lessons learned in childhood, and the old inherited customs including the mother-tongue, are preserved, while at the same time justice is done to the demands of the new home and the duties that were assumed with citizenship of the United States are attended to conscientiously. Indeed, it may be said without fear of contradiction that those citizens of the United States who selected this country deliberately as their home, having forsaken the old fatherland or mother-country, are among the best we can boast of, very often better than those whose citizenship is a matter of birth and, therefore, of accident. But, there are difficulties in the amalgamation of many of the new citizens, within the nation.

This is what I am trying to get at: When people come over here from some European country, they become citizens, they earn their living, get married, found a family, and settle down with the intention of living out their lives in the country of their adoption and, in time, of being buried here, while their children continue their own work and the family tradition. Yet, for some obscure reason, these—immigrants, if you will, often hold tenaciously to their old-country peculiarities, at least to the old language, and, indeed, make the attempt to bring up their children to speak it at least as fluently as English. Nevertheless, these same people would strenuously resent any imputation of disloyalty, even though they condemn friends, relations or acquaintances who do not oblige their children to speak German or Swedish or French, as the case may be.

It seems impossible to establish a logical position of this viewpoint or to convince these persons of its illogical nature. Having become American citizens, having accepted American institutions and customs, it is incumbent upon new citizens to adopt the language of the country, that is to say, the English language, no matter what sentimental reasons may tie them to the old customs and the old language. The acquirement of tongues other than English should be an accomplishment; but it seems wrong to insist upon it as a necessity, as a matter of "patriotic" duty.

In my opinion, the custom of many communities, especially of those which were

settled years ago by numbers of patriots, of enforcing old-country customs and old-country language to the extent of maintaining private or parochial schools and churches, in which the subjects are taught in a non-American language, is to be deplored, because it must, probably, be blamed for the persistency of old-country sympathies, and it necessarily must interfere, more or less, with the unswerving and absolute loyalty to our country.

The foreign language used in these non-American schools and churches usually is anything but pure, however well and correctly it may be spoken by the ministers and teachers themselves. Moreover, it interferes seriously with the acquirement of correct English, and the result very often is an atrocious mixture of languages, in consequence of which one may hear a German declare that he "*muss das haus painten und papern*," or a Frenchman, that he must "*se shaver*." I have heard both remarks made by men who actually thought that they were speaking German, respectively French.

Having become an American citizen, should be as much a source of satisfaction and a cause for pride as the ancient boast: "*Civis romanus sum*." It is the duty of every American citizen to become an integral part of the nation as soon as the process of "melting in" may be accomplished, and not to remain something apart. While Russian, Italian, German, Swedish, Yiddish centers, in large cities, may be picturesque, their persistence does not contribute to the unification of the populace, the constant admonition of prophets and apostles, to the Chosen People, that they should "be separate" in the nations among whom they dwelled, has no justification for those who have sought and obtained the right of domicile and citizenship in this country.

I have become convinced, in the course of time, and against my earlier opinion to the contrary, that the maintenance of other languages than English, in preference to the latter, is not desirable and, indeed, opposed to the best development of citizenship; unless as an accomplishment, although of secondary importance in comparison with the language of the country. National neighborhood settlements, I am certain, should be discouraged and broken up. Churches and schools should be conducted in tongues other than the English only so

far as may be necessary to teach those not familiar with it; but, the demands of the younger people, which are now persistently discouraged by clergymen and parents, to give English instruction and English services, should be complied with freely. In this manner, a greater solidarity of the mosaic making up the population of the United States would be promoted—in this way, the American consciousness—and conscience—would be fostered better.

H. J. ACHARD.

Chicago, Ill.

DOCTOR HOLLMANN'S HONDURAS COLONY

We have recently received several communications from Doctor Hollmann and others relative to his proposed Honduras colony. It is but justice to state that one of these reports, at least, is decidedly unfavorable in every respect. This report is from one who prefers to remain unknown, but, who made a very careful study of the conditions on the ground. Among other things, he says that Columbus, who voyaged up the Patuco River, named it, very appropriately, "The River of Disaster." The colony-site is difficult of access, the Patuco River at times practically impassable, the distance from the coast 150 miles, while La Ceiba, the nearest port, is some 300 to 325 miles distant. This man declares that he has had a most uncomfortable time.

Under the circumstances, we consider it undesirable to print any further discussion of the Hollmann colonization plan.

STALLIN' THE DOC

"Oh, doc, I'm awful sick—guess, I'm goin' this time, sure. I know it's pneumonia, but, it might only be the grip, at that; but, I ache all over. I can stand anything, doc, but pain."

Friend Jim (with a wild wink at me and a quick movement of his hand in the direction of his mouth): "Do you want me to tell the doctor, Johnny, about—well, you know, about the last three days?"

"Tell him? Good God, Jim, there's nothing to tell. I wa'n't feeling well when I left here Saturday morning on No. 2, an' I kept gettin' worse and worse all the way to Mont'al, and I says to the foreman, I says: "I'm all in, I am. Get

one of the spare men to run her back and I'll go in deadhead."

Friend: "But, you know you done wrong, Johnny, startin' in then."

"Take me when I ain't drinking'. I'm contented as a wiper, but, when I gets a touch, I'd climb the sky fur another one in ten minutes until I gets a skinful. You remember the time that me and Big Hughie —? Say, Jim, will you let the doctor tell what's the matter? Th' booze had nothin' to do with it. Didn't I tell ye' I felt rotten afore I ever touched it?"

Friend: "Sure. That's the way it gets ye'. Its' nothin' but the old hop-a-doodle beggin' ye 'to take a drink, an' when ye' gits one lift into ye', ye' don't need no coaxin'. Don't I know? When me and Big Hughie got astarted from the river with 666, an' that string of forty empties, I had to help Hughie into the caboose and my fireman had all he could do to hold me in the cab. Talk about luck! An engineer ought never to touch the stuff, Johnny."

"What stuff are ye' talkin' about, Jim? Don't I tell ye' I have the grip—I have?"

Friend: "Sure, its' the grip ye' have, Jim, an' it'll grip ye' harder than anything I knows, when yur old skin is crackin' fur a tub o' suds. Ye' want all th' doctors in town to help ye' when ye' cant' get any more stuff."

"Hol' on, Jim. Yur' givin' th' doc a wrong impression, ye' are. Can't ye' give him a chanc't to look me over afore ye' horn in like a carload of canners?"

Friend. "Johnnie, he don't need to look fur wud yur hands are shakin', and yur teeth arattlin' agin' the glass like an endman playin' the bones, an' yur eyes like two burnt holes in th' blanket, an' yur tongue as dry as a plumber's firepot. Talk about the European war! There ain't no one suffers like a fella' when he's comin' out of it."

Impatiently: "Comin' out of what, Jim? Are ye' crazy? Can't ye' let the doc take me temperature and count me pulse and see fur hisself that I'm aburnin' up wid fever? I'll not deny I took a little drop in Mont'al, an' a little on the way out, an' a little yesterday and last night, attryin' to sweat out this cold o' mine; but, the trouble is, I can't hold enough o' th' stuff, Jim, to sweat me, I hate the liquor so.

"That's right, Johnnie. Goin' to the bottom of the ocean is nothin' to the way

a fella' hates it when he's gettin' over it. Say, I cursed it all th' way from here to the River, when I had to hold th' pipe wid both hands, I shook so, and to brace me feet agin' the cushions to keep from shakin' meself out of the cab. It's the worst sickness a man ever had, an' I ought to know it, fur I made meself sick a good many times. Ye' can't eat, ye' can't sleep, ye' can't drink an' hold it, an' the sweat rollin' off ye 'like rain, and always thinkin', perhaps the super'll have ye' examined by the country doctor to see why yur layin' off; an' then it's the carpet fur yours, an' thirty days, wid a warnin'."

The patient lay back on the pillow, exhausted, without the strength to expostulate further. Seizing the opportunity, Jim poured forth a tirade against the liquor-habit, that would make good campaign-literature for the antisaloon league.

Johnnie, on his couch, followed his friend wild-eyed, but helpless, until Jim ended up his harangue with—

"Give him the jab, doc. Ther's nothin' like the jab to bring them out of it. Of course, it will make him puke things he never swallowed, but, he'll sleep like a baby after that. There's no medicin' fur me like the jab."

Knowing that Jim was a past-master in the art of absorbing the stuff that "takes the grease spots out of granite," and, as a consequence, spoke with authority, I gave Johnnie a hypodermic injection of 1/10 of a grain of apomorphine, then departed.

EDMUND J. MELVILLE.

St. Albans, Vt.

WHAT SHOULD THE DOCTOR DO?

I know what I should do, I should very kindly tell the father of the young lady that it would be to his interest and to the interest of the young lady to communicate with the grandfather of the young man. Give this advice in a manner and so impressive that it will excite the wonder of the parent. If the young chap is not of a rapid-fire, self-starting nature, he will sit

up and take notice of the admonition. I think the informant would always be held in fond remembrance for this service.

C. C. VEDDER.

St. Johnsville, N. Y.

[This is a reply to the question of a correspondent as printed on page 839 of CLINICAL MEDICINE for November. Without a doubt, the action proposed by Doctor Vedder would bring results. Would it be the best way?—Ed.]

DEFINING THE UNDEFINABLE—WOMAN

You are everything that we want, all that we try to avoid.

You are an economic necessity, an expensive luxury.

You are as fickle as April, as constant as time.

You are as wrathful as Thor, as peaceful as Kang-wang.

You desire protection, but scorn the protector.

You are an exclamation-point, never a period.

You are the angel of infancy, the pest of youth.

You are the annoyance of manhood, the solace of age.

You despise cowardice, but, shudder at valor.

You are modest at home, but, on the beach—ah, men!

You are devotedly religious, impatient of social restraint.

You dearly love freedom, but, adhere to conventionalities.

You are the embodiment of love, the incarnation of jealousy.

You sympathize with our pain, but, inflict us with heartache.

You are infinitely self-sacrificing, intensely selfish.

You are the goddess, we worship; the demon, we damn.

Your love is like cheese, mellowed and strengthened by age; but, age breeds mold.

You are alpha and omega, the start and the finish, of argument.

You are the bane of our existence, the joy of our life.

You are inexplicable, indefinable, understandable.

You are the best thing on earth.

You are—must I say it?—Woman!

E. S. HASWELL.

Albany, N. Y.



In the World War

THE MAKING OF AN ARMY-SURGEON

After the midway point has been passed, about the fifth week, from there on, life at the training-camp takes on a new phase. The proverbial silver lining shows above the dark cloud. The physicians in each company that have picked up the military drill are appointed junior instructors, to drill their less fortunate comrades or the enlisted men of the hospital corps, and, so, are able to give orders instead of taking them.

The hardening hikes are replaced by real equitation—riding of cavalry remounts. These horses are very intelligent and know what is expected of them. Several of us had never in our lives been on the hurricane deck of a horse, but, became fairly expert in four lessons of one hour each. In fact, the fourth lesson the instructor led us up and down ditches, galloped a straightaway of a mile on a hard gallop, and all of us stuck to the saddle without mishap and, by following directions, were not sore or chafed by the saddles flipping up and hitting us where we are soft. And thus one more accomplishment is added in the making of an army medical officer out of a civilian automobile-riding family physician.

The drive lets up a good deal in the lessons. The subjects begin to overlap each other, and, so, the work is much easier.

The dry subjects, being now fairly well mastered, are replaced by lectures by reserve officers who have already served in European hospitals with the different units that have been outfitting from the big cities since the war has started. These lectures are illustrated stereopticon views, the soldier physicians explaining graphically their experiences, as each slide is shown, telling us, in few words sometimes, what they learned in fire baptism and by exhaustive work. The constant battle with tetanus and gas-bacillus infection, cases of

amputations on men suffering from shock, where the amputation must be complete and patient off the table in ten minutes. The handling, in field hospitals, of 600 new cases in one night, that must be dressed, fed, and the more-seriously wounded ex-rayed, operated upon, and sent back to an evacuation-hospital, all within twenty-four hours, and be ready to receive another batch of 600 the following evening. The rapid handling of patients that have been gassed. The x-raying of gas-bacillus infection wounds and deciding when or not to amputate for the ravages of this ever present grim destroyer. The bombing of hospitals by the Hun aeroplanes. These are the things that hold the audience spellbound with tense interest to the last word.

A lecture by a French lieutenant, here in this country convalescing from wounds, who in his volatile manner reenacts the incidents of that glorious victory, the Battle of the Marne, where every soldier was grimly told that here the ravishing destructive Hun must be stopped or France would die, and it were better that he should die on the field than to live to see his country die. And when he finished by describing how the French broke through the dense masses of Huns and the Teutons falling back, gave ground to the French—ground that never since has been defiled by Teutonic feet, except those that march by without arms and with hands up in the air, in token of surrender—his physician audience loosed their pentup enthusiasm in a roar and a handclapping that must have warmed his heart.

In answer to our questions, he described the part the physician takes in battle, his sanitary personnel, use of the ambulances, motor- or animal-drawn. Every crumb of information we could pick up on this question was greedily sought and devoured, in our conscientious endeavor the better to fit ourselves for our coming baptism of fire.

Among other lectures, were several on the deadly gases used by our treaty-despising



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enemy and now used by the Allies in reprisal. These gases were classified as lacrimal, suffocating, paralyzing, and asphyxiating. Benzochlorine and benzobromine are examples of tear-producing gases, which cause an intense irritation of the membranes of eye, nose and throat, and in sufficient doses cause vomiting. Hydrocyanic gas kills by paralyzing respiration. All the poison gases are readily neutralized by alkalis, except phosgene. The gas-mask, with which every officer and soldier is equipped, affords absolute protection if properly and promptly applied.

These lectures are followed by "gas-mask drill," where all of us are taught to apply the mask in six seconds. Every soldier in our armies today must be able to put on his mask in six seconds before he is allowed to go to the front. The masks are of the "box-respirator" type, a rubber tube, held in the mouth, connecting with the "box." Inspiration and expiration must be through the mouth. To insure this,

the mask is fitted with a little pair of nose-pieces, to pinch the nostrils shut. Thus the hellish ingenuity of the Hun with his poison gas, in absolute disregard to the article of the Hague, go for naught, against the calm skill of a civilized world that ever stands ready to go him one better.

The gas and gas-mask instruction of the men of our army is left to the physician. The life of the mask is but twenty-four hours. A card is in each mask, on which the soldier marks down every hour that it has been used. It is the physician's duty to inspect these and see to it that they are always serviceable, for, the wearer's life depends on it.

Shoefitting is left to the army-doctor and is an extremely important part of our instruction; for, a poorly fitting shoe quickly incapacitates a soldier for marching, and thus for duty. We want no corns, bunions or overlapping toes on a marching foot.

Under contagious diseases, the venereal peril is discussed. A soldier, upon expos-

ing himself to venereal diseases, is compelled, under penalty of a court-martial for failure to do so, to report to his surgeon, where a prophylactic treatment is given at once, regardless of the hour, day or night, and then, he is kept under observation till the period of incubation is past.

Typhoid and paratyphoid fevers, the former scourges of an army, are little found now, due to the zeal with which every man is inoculated as soon as possible after entering the service. This inoculation is compulsory; but, it is rarely that we hear

regular service takes us through the pitfalls and intricacies, the heartaches and triumphs of the "Manual of Courts-Martial of the U. S. A." in such an able manner that we absorb it almost without conscious effort.

The spirit of comradeship begins to awaken in us. That spirit which is stronger than fellowship, fraternalism or friendship. That spirit that is seldom if ever found in civil life and which grows as we continue in the service, till it finds its climax in the field, on the march or in a campaign and by which one man will share his last crust and will discount his own life to aid his comrade.

These are but a few of the concrete facts that go to make our intensified training-course so absorbingly interesting; and, as we gaze ahead into the perspective and know our course must soon come to an end, we are torn between mingled regret to have to leave this fountain of learning and an intense eagerness to get out and apply all this new knowledge, and thus do credit to ourselves and our enthusiastic though patient and painstaking instructors.

And now more than ever before are we satisfied with ourselves for having entered the service. Now we feel (not in egotism, either) that the man with the power of perspective is the M. D. that is already in. This army of ours is such a gigantic affair. Openings and opportunities for promotion, distinction, and honor are every-

a man protest against it. We welcome anything that is to make us "more fit to do our bit."

Every man is revaccinated against small-pox, whether recently vaccinated in civil life or not, and, to judge by the number of pockmarked faces I saw among civilians in cities near our camp, I feel that it is a splendid thing.

With respect to typhus fever—of which so far there has not been very much in the European armies—we are taught the role the body-louse plays and the methods of delousing the men after each return from trench-duty. As for epidemic meningitis, scarlet-fever, measles, etcetera, the prompt diagnosis and equally prompt isolation and quarantine of susceptibles hold these formidable enemies down to a minimum.

A major-surgeon from the regular army artillery lectures a few interesting hours on the makeup and personnel of an artillery regiment. Another major-surgeon, of cavalry, does the same about a cavalry regiment. Still another major-surgeon of the



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where ahead of us, plums are ready for picking do we but show aptitude, eagerness, and ability. The sun just now arising on the day of our military career is beautiful and bright, very few clouds mar our skies, and to say that we are well-

satisfied with our self-imposed duties is putting it mildly.

As we are ready for graduation and assignments are coming into headquarters for us, imagination runs riot as to where are we going to be sent. A few of us are assigned to base hospital in some southern camp or city. A few more, to infantry, artillery or cavalry regiments in some cantonment of the National Army. One fortunately to a base hospital, to leave for overseas service in a week. Several others, to tour the country, giving gas-lectures and drills to the enlisted men of the National Army. Some, to field hospitals, some, to evacuation-hospitals, with prospect of overseas service very soon. Nine (I among them) drew one of the plums, namely, the aeroservice of the signal corps; four of these having proceeded at once to Long Island, and five of us to San Antonio, there to join our squadrons and then sail for the old world, which to us is a new world, full of untold, uncounted possibilities to see the world, to represent our profession, to do our bit.

By the time this is in print, we shall have landed "somewhere over there," and I hope to be able to write further from that indefinite locality.

ROBERT C. MURPHY,

Fort Riley, Kan. 1st Lieut. M. R. C.

Doctor T. H. Standlee.

Lieutenant, Doctor T. H. Standlee, whose likeness we print on this page, is well known to the readers of CLINICAL MEDICINE for his practical and timely letters. He has given up a good practice in Lyra, Texas, at great sacrifice, and is now on active duty in Camp Travis, Texas.

A WARNING AGAINST TRACHOMA

"The News Letter," published five times a year by the National Committee for the Prevention of Blindness (130 E. 22nd Street, New York City), in its October issue, contains the following warning against trachoma, a warning that should be heeded, especially by physicians having to do with the examination of drafted men for military service:

In the last issue of *The News Letter*, attention was directed to the action taken by the section on ophthalmology of The American Medical Association, at its annual

meeting in New York City, in June, 1917, urging the national health-authorities to maintain strict watch for trachoma indications in applicants for enlistment in the various branches of the service.

Shortly thereafter a special statement was issued by the U. S. Public Health Service, to which the attention of every medical inspector of recruits was directed. Not only are the physicians urged to make most careful examination for this disease, but, "an applicant who is found to be suffering from a well-marked trachoma," the statement reads, "should not be immediately rejected, but, should be given treatment and his trachoma cured. He can then be examined again, to determine whether he has resulting visual defects sufficient to cause his rejection. In this way, a case of contagious disease will be eliminated and probably a good soldier saved."

Inquiries were made, during the summer, of the National Committee for the Prevention of Blindness as to prevalence of tra-



DOCTOR T. H. STANDLEE.

choma in the U. S. Navy. They reveal a remarkably small occurrence of this disease among the enlisted men in the Navy and Marine Corps, a fact doubtless due to the thoroughness of the work of the government medical service.

NERVOUS DISEASES IN THE BRITISH ARMY

It has been found that one-half of the discharges from the British army are due

to wounds and one-half to disease. Of those discharged because of disease, one-twelfth are due to shell-shock or other form of neurasthenia. Up to April, 1917, there had been 8,000 cases of epilepsy in the British army. Many cases of nerve diseases develop among those who have never been in the trenches and who should not have been admitted to the army at all.

I will first discuss flying and the nerves, and begin by sketching an actual case.

T. B. entered the royal flying corps at the age of 18 years and 6 months. His mother and brother were bundles of nerves. He himself was very stolid, never became nervous, never thought of danger or death or the means of avoiding it. When he first went to the front, six months ago, he wrote regularly to his friends, and his letters were always in a humorous vein—after the manner of an Englishman when he is in that vein—which means, a continuously jocular attitude of mind.

When he returned to London on leave, he seemed very tired. American soldiers will lack this great solace which British soldiers enjoy, for a fortnight about twice a year. It did not seem to have been permanently helpful to our friend, however, for, his first letter after his second arrival at the front manifested a distinct change. His bravado and jokes were gone. He began to be cynical in tone, dissatisfied, irritated.

When he came to London for the second time on leave, he was very nervous. He swore at a taxi-driver in the presence of ladies, and for a very trivial accident. He refused to go underground, although it would have been much quicker and more convenient for all. When he found a shop closed, to which he went for a purchase, he took it as if done merely to vex him. He spoke in a rage to people who rose in seats in front of him at the theater; could not keep his hands still; rubbed paper to bits; spent \$125 in four days gadding about, although he had no necessary expenses and was entertained by friends. After two or three months' service, fliers are granted a long leave, and they may be granted release after 300 hours in the air. Now, six months after first going out and after 300 hours in the air, this flier has been released from service. He is entirely cynical, offended at every little thing for imaginary reasons.

This man's case may or may not be an

average one. When he was in training, 8 of the 10 who began training were killed. Several months before he retired, there were 18 men between him and second pilot, but, he became second pilot through their death. He killed 3 Germans. He had part of his machine shot away, so that it got out of control while landing, and his wrist was sprained. Finally he got so that whenever he went up, he wondered whether he would come down alive. He confessed that it was purely because of "funk" that he took advantage of the rule to retire after completing 300 hours.

I have here described a gradual loss of poise in the nervous system. Perhaps more common in this war is the variety of neurasthenia which has had a sudden onset from being buried by an explosion, blown into the air, and the like. Sleeplessness, inability to work or think, loss of nerve, tremulousness are symptoms of both conditions.

In shock-neurasthenia, sight, hearing, speech or some other function often is lost. If through shock a man is unable to assume the upright position, he may be hypnotized and the while his voluntary brain is out of gear his back may be straightened. A man who, because of shell-shock, can not speak may accidentally find himself in the water because his rowboat has suddenly turned over; if, now, he calls for help, a cure has been accomplished. Sometimes dumbness is retained because of the subconscious dread of returning to the front if the subject speaks again. The patient would not be likely to admit this even under psychoanalysis. Yet, if he knows that he will not be returned to the trenches, his recovery is more likely. Major Macdougall thinks that 10 percent of nerve-cases in the army can be helped by hypnotic suggestion, and perhaps 1-10 of 1 percent by psychoanalysis.

A man had lost his speech and hearing, absolutely, through a shell exploding close to him. Chloroform was administered. Under its influence, he began to swear. The anesthetic was quickly withdrawn and the physician talked into his ear. As he came around, his maudlin talk had not ceased. He regained consciousness while he was both speaking and hearing.

Sir John Collie thinks that a combination of all treatments is needed, the elements varying in proportions with the various patients—rest, faradism (strong

enough to be painful), hypnotism, work, occupation, massage, and so forth.

Dr. Thos. Sumsden advocates the "guest"-method of sanatorium-treatment, and there is a hospital with wide lawns at Golders Green where it is used. A peer, the dean of a cathedral, a score of wealthy land-owners have tendered country places for extending this treatment.

A resident physician is better than a visitor. No nurse should be employed who is not an optimist. Segregation of shell-shock patients will prevent the tendency of such patients imitating each other. These victims are helped by being placed among convalescents, but, they are inspired by being left among surgical cases. Real sympathy is of aid; however, this must be successfully disguised; otherwise, nothing can be more harmful, and, thus the visits of a wife or sister may do great harm. If there is not an atmosphere of hope, the whole administration should be promptly changed. Any patient who does not make progress must not remain. No attendant should be worked so hard as to become stale.

No class of cases so well repay the time and care expended upon them as nerve-cases. Perfect restoration is common, yet, the young airman whom I have described will perhaps, never be able to accomplish feats like that of the Australian airman, fresh at the front last week, who pretended that he had been hit by a barrage around a German observation balloon and came side-slipping down toward the ground. The gunners stopped firing, whereupon he made for the balloon, hit it with an inflammatory bullet and got away before the gunners realized how they had been tricked.

WALTER MOORE COLEMAN.

London, England.

UNIVERSAL MILITARY TRAINING

It gives us pleasure to accede to the request of Dr. Franklin H. Martin, the secretary of the Clinical Congress of Surgeons of North America, to publish a resolution that was adopted unanimously by this congress at its recent convocation at

Chicago, on October 25, 1917. The resolution is as follows:

Whereas: The experiences of the nation convince us of the necessity for universal military training, to furnish qualified men for defense, to strengthen manhood and mental poise, and to make for a more efficient citizenship; and

Whereas: We believe it will democratize youth and furnish discipline, while developing physical force and endurance, and will produce better fathers and workers for the ranks of peace;

Therefore: Be it resolved that the Clinical Congress of Surgeons, at its eighth annual session, urges upon Congress at its coming session the passage of a measure along the general lines of the Chamberlain bill for universal military training, and that the cantonments now used by the national army be utilized, if possible, for such work.

THE DRAFT EXAMINATIONS

Doctor Burdick's experience, as related in the September issue, page 681, of *CLINICAL MEDICINE*, check up with ours very closely. Our examination of 550 drafted men gave us about 40 percent physically fit for military service. The heaviest exemptions were due to bad teeth and tonsillitis; no rheumatism in these cases; 1 percent heart lesions, being 6 with leaky hearts; no joint trouble.

There is a tremendous lack in the care of teeth. Certainly, the dentists, so far, have not been successful in educating our people to care for their teeth—and, too much can not be said as to this.

There was no tuberculosis, no inguinal hernia, no syphilis, no chancre, no gonorrhea in this bunch. Varicocele, left side, was present in 2 percent. Undescended testicles were found in 4 of the 550 men examined. Vision generally was good. Hemorrhoids were present in 1 percent. There were 2 cases of spinal curvature of a disqualifying degree. No osteomyelitis and ankylosis was seen.

GEO. A. LOVE.

Preston, Minn.

Just Among Friends

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER, A. M., M. D.

[Continued from November issue, page 856]

THE leading idea of "Pippa Passes" is very beautiful, being intended to show the intertangling threads of virtue and vice in the world. Pippa is the name of an Italian factory-girl who earns just her bread and salt, and, happy and innocent, sings as she walks the earth, as a lark does in scaling the heavens. As she plods morning and night to and from her daily drudgery, some portions of her song fall upon the ears of the wealthy and corrupt. The contrast is very artistic, although more calculated to rouse the philosopher than the worldling, and these verses are so many pearls thrown before swine. In his heart of hearts, there is doubt as to whether any man believes in any god but himself, and when Milton's devil says, "Evil, be thou good!" he merely utters the foregone conclusion of all human beings that evil be essential to pleasure! No man ever lived who more tolerantly regarded his own vicious deeds than his neighbor's virtuous ones. It was on this profound knowledge of his fellow creatures that Browning based his supreme scorn for the race, and I am of the opinion that there are few deep thinkers but who will most conscientiously pronounce him right.

Into the mouth of this Pippa, the poet puts some of the profoundest observations, and condenses quite a Baconian essay in a little song she sings on her first appearance:

All service ranks the same with God;
He now, as formerly he trod
Paradise, his presence fills
Our earth, each only as God wills
Can work—God's prophets, best and worst,
Are we; there is no last or first
Say not a small event! Why "small?"
Costs it more pain than this ye call
A "great event" should come to pass
Than that? Untwine me from the mass
Of deeds which make up life, ~~the~~ deed
Power shall fall short in or exceed!

There is in this drama one great scene of marvelous power. It is between Ottima,

the young wife of an old man, whom she and her paramour Sebald have murdered the night before. The next morning, after having spent the night in guilty dalliance, they awaken to the foulness of their crime and the insufficiency of vice to bestow happiness. They are conversing in her bed-chamber, when Pippa passes, singing one of her songs, which concludes with

God's in his heaven—
All's right with the world!

The words awaken in Sebald's heart his lingering humanity, and he sees in his beautiful companion a hideous and loathsome wanton. In a few lines, how vividly he paints the ingratitude of the vicious, who, when the paroxysm of excitement is past, despise their instruments.

Sebald:

Leave me!
Go, get your clothes on—dress those shoulders.

Ottima:

Sebald!

Sebald:

Wipe off that paint! I hate you.

Ottima:

Miserable!

Sebald:

My God, and is she emptied of it now!
Outright now!—how miraculously gone
All of the grace—had she not strange
grace once?

Why, the blank cheek hangs listless as
it likes,

No purpose holds the features up to-
gether,

Only the cloven brow and puckered chin
Stay in their places; and the very hair,

That seemed to have a sort of life in it,
Drops, a dead web!

Ottima:

Speak to me—not of me.

Sebald:

That round, great, full-orbed face,
Where not an angle

Broke the delicious indolence—all broken!

Ottima:

To me—not of me! Ungrateful, perjured
cheat!

A coward, too; but, ingrate's worse than
all!

Beggar—my slave—a fawning, cringing
liel!

Leave me! Betray me! I can see your drift!

A lie that walks and eats and drinks!
Behold:

My God!

Those morbid olive faultless shoulder-blades—

I should have known there was no blood beneath!

Ottima:

You hate me, then? You hate me, then?

Sebold:

To think

She would succeed in her absurd attempt
And fascinate by sinning, show herself
Superior-guilt from its excess superior
To innocence! That little peasant's voice
Has righted all again. Though I be lost,
I know which is the better, never fear,
Of vice or virtue, purity or lust,
Nature or trick! I see what I have done,
Entirely, now! Oh, I am proud to flee
Such torments—let the world take credit
thence—

I, having done my deed, pay, too, its price!

I hate, hate—curse you! God's in his heaven.

The Dead-Sea fruit of vice has seldom been so boldly set forth as in these words.

Browning could be seductively erotic, also. A truly erotic transport appears in "Women and Roses":

Deep, as drops from a statue's plinth,
The bee sucked in by the hyacinth,
So will I bury me, while burning,
Ouench, like him, at a plunge my yearning;
Eyes in your eyes, lips on your lips!
Hold me fast where the cincture slips,
Prison all my soul in eternities of pleasure,
Girdle me for once! But, no—the old measure,

They circle their rose on my rose-tree.

A similar sensual craving, delicately expressing a feminine subserviency, says:

Be a god and hold me
With a charm!
Be a man and hold me
With thine arm!

Teach me, only teach Love!
As I ought,
I will speak thy speech, Love,
Think thy thought—

Meet, if thou require it,
Both demands,
Laving flesh and spirit
In thy hands.

We know that sex, with its enchantment, has appealed to men of letters of the highest distinction, and Browning was no exception. Yet, we know from the "Love Letters," graciously given to the world as a radiant exemplar of all that is sweetest and noblest in true, pure love that his senti-

ments were of the most exalted, reverential nature, comparable only with those of his rare and spiritual wife.

One who reads "Saul," "Childe Roland," and "Rabbi Ben Ezra" will find he has been thrilled by new experiences and new passions. Browning goes back to a new and vital sort of experience for his material; he portrayed life as he saw it, without show of personal enthusiasm, for the truths that experience of life suggests. He gives us all the currents of thought and feeling that interrupt or divert the main stream, and all that man is becomes an open page for us; the conflict and the passion, the joy of aspiration, and the surging protest against defeat.

"Childe Roland" is strangely captivating, but, open to many interpretations. It is doubtful whether any quotation is more familiar to cultivated minds than the following from "Rabbi Ben Ezra":

Not on the vulgar mass

Called "work" must sentence pass—

Things done that took the eye and had their price;

O'er which from level stand

The low world laid its hand

Found straightway to its mind, could value in a trice;

But, all the world's coarse thumb

And finger failed to plumb,

So passed in making up the man's account

All instincts immature,

All purposes unsure,

That weighed not as his work, yet, swelled the man's amount;

Thoughts hardly to be packed

Into a narrow act,

Fancies that broke through language and escaped,

All I could never be,

All men ignored in me,

That I was worth to God, whose wheel the pitchers shaped.

Browning's ability to bring feeling to such intensity of passion, that even thought is fused into the very substance of emotion, is one of his most striking characteristics. See how instinct with the deepest passions of the soul are these lines from "Cleon", passions that compass all experience and are so vital in our lives that we do not speak of them to others.

Say, rather, that my fate is deadlier, still,
In this, that every day my sense of joy
Grows more acute, my soul (intensified
By power and insight) more enlarged, more keen;
While every day my hairs fall more and more,

My hand shakes, and the heavy years increase—
 The horror quickening still from year to year,
 The consummation coming past escape,
 When I shall know most and, yet, least enjoy—
 When all my works wherein I prove my worth,
 Being present still to mock me in men's mouths,
 Alive still, in the praise of such as thou,
 I, I the feeling, thinking, acting man,
 The man who loved his life so overmuch,
 Sleep in my urn. It is so terrible,
 I dare at times imagine to my need
 Some future state revealed to us by Zeus,
 Unlimited in capability
 For joy, as this is in desire for joy—
 To seek which, the joy-hunger forces us;
 That, stung by straitness of our life, made strait
 On purpose to make prized the life at large—
 Freed by the throbbing impulse we call death,
 We burst there as the worm into the fly,
 Who, while a worm still, wants his wings
 But, lo!
 Zeus has not yet revealed it; and, alas,
 He must have done so, were it possible.

Observe how through the stress of emotion we come to the revelation of a truth that might be didactic, but, is here so vital a part of the speaker's feelings touching memory and hope and fear and aspiration that we accept the passionate need of immortality as valid argument for our imagination, kindling it to a glow of quickened response to the vision of a state "unlimited in capability for joy."

I have not space to dwell at any length upon the many simple things, such as "Youth and Art," "By the Fireside," "Fra Lippo Lippi," "The Patriot," "A Toccata of Galuppi's," "My last Duchess," "Count Gismond," and so forth. This last begins with a full blast that commands immediate attention;

Christ God, who died for man, save most
 Count Gismond; for, he once saved me.

From the first line of this marvelous lyric to the last, it carries one on like the peal of a trumpet.

Someone has said that a predilection for Browning is like a taste for olives, an artificial one that requires immense cultivation and perseverance to acquire. But, I think, as Barry Cornwall said, that Browning's poetry is like the fabulous cusco-nut, the more it is masticated, the sweeter and more potent it becomes—and which a long in-

dulgence in enslaves to its own flavor.

"But, however obscure," says Lewis Worthington Smith, "however burdened with thought, Browning's poetry always throbs with the warm feeling of a man alive to all impressions from without and prompt to transmute them, through the potent alchemy of their reflex upon the experiences and passions of the soul, into the fervor of poetry. Intellectual, quick to catch the color of other times and places, finding meaning in all the facts of life, able to seize at once upon what is dramatic and significant in any situation, for readers who are spiritually prepared to acknowledge kinship with him, he has more of quickening power than any other English poet, except Shakespeare."

In November, 1846, Browning married Elizabeth Barrett. Their acquaintance began through Browning sending her a copy of his "Dramatic Lyrics". This led to a message—which ripened into a correspondence carried on in Greek—interviews succeeded, until at last they became sufficiently intelligible to each other to marry.

Mrs. Browning in a sonnet, has thus commemorated the first kiss of love:

First time he kissed me he but only kissed
 The fingers of this hand wherewith I write;
 And, ever since, it grew more clear and white,
 Slow to world-greetings, quick with its "Oh,
 list,"
 When the angels speak. A ring of amethyst
 I could not wear here plainer to my sight
 Than that first kiss. The second passed in height
 The first and sought the forehead, and half missed.
 Half falling on the hair. Oh, beyond need!
 That was the chrism of love, which lovel's
 own crown
 With sanctifying sweetness did precede.
 The third upon my lips was folded down
 In perfect, purple state; since when, indeed,
 I have been proud and said, "My love, my
 own."

Could there be a more glowing transport of woman's devotion, expressing the highest, purest quality of Saxon love? And could there be a stronger rebuke to those who would abolish the kiss? "Do you know whence comes our true power?" says DeMaupassant, "From the kiss, the kiss alone!—The kiss is merely a preface, however, but, a charming preface more delicate than the deed itself, a preface that one reads over and over without stopping,

while one cannot always read the book. Yes, the meeting of mouths is the most perfect, the most divine sensation given to mortals, the last, the supreme limit of happiness. It is in the kiss, in the kiss alone, that one believes now and then that he feels the impossible union of souls which we strive after, the fusion of feeble hearts."

And could there be a better defense of the sonnet than in "Sonnets from the Portuguese," where Mrs. Browning's love, as well as genius, finds its noblest utterance?

In Byron's journal, under the date of December 17, 1813, I find the following; "Read some Italian, and wrote two sonnets on—I never wrote but one sonnet before, and that was not in earnest, and many years ago, as an exercise—and I will never write another. They are the most piling, petrifying, stupidly platonic compositions. I detest the Petrarch so much, that I would not be the man even to have obtained his Laura, which the metaphysical, whining dotard never could."

Byron died many years before "Sonnets from the Portuguese" were published; but, I think, had he lived to read these, he would have said that the sonnet had reached its sensuous perfection.

Because of one of the sweetest love-stories in the world's history, that of Petrarch and his Laura (although the love-story of the Browning's is sweeter), the sonnet first attained its wide regard among those capable of knowing when verse is exquisite.

Perhaps the best expression that can be used regarding the duty of a sonnet is, to

say that it must "delight." The perfect sonnet has, indeed, a secondary effect upon the mind, in that it excites the admiration of the reader; but, this pleasant consideration is almost necessarily a sequence of the first. A fine sonnet is never an accident, any more than is a jewel the quality of which has been revealed by the wisdom of its facets. A lapidary must have been at work. The delight comes from the thought revealed; the admiration, from the manner of expression.

Consider what the sonnet is. Originating in Italy, near the time when the Dark Ages were disappearing under such lights as Boccaccio, Dante, and, later, Petrarch, it was a device in poetical form, which, while in a way restrictive, was, nevertheless, upholding. It must consist of but fourteen lines arranged in a particular way, and it must have no other setting. Mark what followed. The sonnet was reserved for artists. In or under the hands of others it became a folly. Its form preserved it. Its demand was a single exquisite fancy—and the one to express it.

Of course, the sonnet precludes grandeur, but, grandeur is what we want occasionally. A great Turner painting is grandeur. The Mona Lisa, recently stolen from the Louvre, was a sonnet done with a brush. It was a perfect sonnet, produced by one of the greatest artists. There was the single idea, the compelling and absorbing thing, the inscrutable smile on the face of a woman. There you have a sonnet on canvas. But, what a smile was required and what a hand at the brush! Who else could have made so much of a smile?

SIMPLICITY

I WONDER if true simplicity is ever anything but a by-product. If we aim directly for it, it eludes us; but if we are on fire with some great interest that absorbs our lives to the uttermost, we forget ourselves into simplicity. Everything falls into simple lines around us, like a worn garment.

—"David Grayson."

Among the Books

POTTENGER: "CLINICAL TUBERCULOSIS"

Clinical Tuberculosis. By Francis Marion Pottenger, A. M., M. D. With a chapter on Laboratory Methods, by Joseph Elbert Pottenger, A. B., M. D. In 2 volumes. St. Louis: The C. V. Mosby Company, 1917. Price \$12.00 net.

This treatise on tuberculosis without a doubt is the most complete textbook on the subject that has been published in the United States. Unlike the large "Handbuch" on the same subject, namely, the one edited by Brauer, Schroeder and Blumenfeld, which was in course of publication when the European war broke out, it is the work of one man (with the exception of the technical chapter on laboratory methods contributed by the author's brother and associate) and bears the imprint of a one-man work, the personal touch of a book embodying the results of one writer's experience and the views thus formulated.

Doctor Pottenger is essentially a clinician and has written his work from the viewpoint of the physician. While conversant with theories and hypotheses and referring to them, he aims to present facts in so far as they have been established. This, of course, is of value to other clinicians, particularly with reference to the treatment of tuberculosis, which has passed through so many vicissitudes of faddism and fashion, some of which even amounted to intolerant dogmatism.

That the author is a practitioner, and not a theorist, probably accounts for the fact that he directly starts with the very substance of his subject, without any introductory disquisition, historical or otherwise; discussing in the first volume (comprising 656 pages of text) the pathology, etiology, diagnosis, and prognosis of tuberculosis. Of special interest is the fact that the author accepts the view—first axiomatically voiced, we believe, by Schlossmann, of Duesseldorf—that the tuberculosis of adults develops on the basis of an in-

fection contracted in childhood, and the resistance to which has been broken down. As for the infection of hitherto nontubercularized persons during adult life, the author believes this to be of rare occurrence, although the possibility cannot be denied. This view has now been accepted by virtually all investigators. A further subject claiming our interest is, the important role credited to the abnormal functioning of the nervous system, more particularly the so-called vegetative nervous system.

In the discussion of diagnosis, extended mention is made, very naturally, of the refinements in physical diagnosis that have been introduced into practice by the author himself within recent years, and which have given occasion for so many interesting investigations. Also, the study of the nature and significance, including the limitations, of the tuberculin tests is of great importance and highly instructive.

The second volume, comprising approximately the same number of pages as the first, deals with the complications of tuberculous disease and with the treatment. It will, probably, be consulted more frequently, on that account, than volume one; unfortunately so, for, a careful study of the pathology, etiology, and symptomatology will make possible a far more sensible and successful treatment. In this (the second) volume, the Reviewer wishes to recommend especially the study of the author's dissertation on fever in tuberculosis, and also that on tuberculin reactions, both of which are highly interesting and, in many respects, original. In the chapters dealing with treatment, all forms and methods in vogue have found consideration and evaluation. As a successful sanatorium-physician, the author very naturally is convinced of the desirability of institutional care for tuberculous persons; and, indeed his position finds ample support in the experience of most tuberculosis-physicians familiar with institutional as well as home treatment.

If Osler declared, with much justice, that a full knowledge of syphilis comprises that

of medicine itself, the same might be said of tuberculosis. The tuberculous process may affect every tissue of the organism, for, not a single one is exempt. Tuberculous disease has engaged, in its various manifestations, the services and efforts of the internist, the surgeon, the eye-, ear-, nose-, and throat-man, the alienist, and the specialist in nervous diseases, and no less the one in genitourinary affections; in short, there is not a specialty in medicine that does not find occasion to concern itself with the study of tuberculous affections. It follows that the tuberculosis *specialist* is obliged to familiarize himself with all the various manifestations of tuberculosis and to become conversant with the many specialties that are dividing the field of medical practice. Moreover, since tuberculosis is, perhaps, the best-studied of all diseases, it can readily be seen that a thorough familiarity with its problems will enable the student to apply his knowledge gained in this field to his researches in others. Indeed, many of the current investigations in, for instance, immunity, were undertaken primarily for the purpose of elucidating problems connected with the study of tuberculosis. It may be added, by way of commendation of the work before us, that the essential results of physiological pathology have been utilized by the author in his study of tuberculosis, to the very great advantage of the student, who thereby is enabled to gain a better understanding of the nature of disease-processes.

While it is true, as has been said by one reviewer, that the work is very cumbersome and likely to frighten the general practitioner, it is to be hoped that such will not be the actual case. Indeed—although it must be admitted that the tuberculosis-physician will first of all be the one to seize upon the wealth of information contained in these two volumes—they are designed to be of service to the general practitioner as well; and, as a matter of fact, they are well adapted for this purpose. Nor do we agree with the criticism that has been voiced, that any given information can be found only with difficulty. The fact that the index not only is very complete, but, also, that it is appended to each of the two volumes, aids rapid reference. Index and table of contents, moreover, are sufficiently exact and detailed to aid in locating the

discussion of any particular subject that may be under investigation.

Some months ago, the author declared to the present Reviewer, in the course of a conversation, that this was to be his last work; that he was through. It is to be hoped that this decision will not be final. Doctor Pottenger's work is too valuable and too instructive not to need to be continued. The Reviewer trusts that he may have the pleasure and privilege of reviewing further works from his pen. The present one is cordially recommended to every physician, whether he specialize in tuberculosis or not, for careful and continued study. He will be richly repaid.

"DYKE'S AUTOMOBILE ENCYCLO- PEDIA"

Dyke's Automobile and Gasoline-Engine Encyclopedia. Sixth Edition Revised and Enlarged. Containing 429 charts, inserts, dictionary, index, and supplements on the Ford and Packard machines, and treating on the construction, operation, and repairing of automobiles and gasoline-engines. By A. L. Dyke. St. Louis: A. L. Dyke, publisher. 1917. Price \$3.00.

The author of this encyclopedia was the first one in America to publish a practical book on automobiles. Incidentally, he also originated the first auto-supply company and has had a wide experience as a publisher of books dealing with self-propelling vehicles. This encyclopedia is remarkably complete as to its splendid index, by means of which information concerning any subject, troubles and how to remedy them on automobiles can readily be found. As a textbook, it is used in the leading automobile-schools of the country, to teach the fundamental principles of assembling a car, of engine construction and other problems connected with the construction and manipulation of gasoline-motors. It is needless to say that a book like this must be of great value to everybody who owns a car, whether he can afford a chauffeur or not—it is always well for the boss to know how things should be done even if he doesn't do them himself.

The book is fully illustrated and contains supplements on the Ford and the Packard cars, as well as a very serviceable dictionary of automobile-terms. We heartily

recommend this encyclopedia to automobile owners.

PAGE: "HOW TO RUN AN AUTOMOBILE"

How to Run an Automobile: A concise, practical treatise, written in simple language, explaining the functions of modern gasoline-automobile parts, with complete instructions for driving and their care; including the most thorough and easily understood illustrated instructions on 1917 automobile control system ever published. By Victor W. Pagé. New York: The Norman W. Henley Publishing Company. 1917. Price \$1.00.

Mr. Pagé's books on motor cars are well known to car-owners. The title of the one before us indicates what may be found in its pages, which may be consulted with confidence.

PAGE: "GLOSSARY OF AVIATION TERMS"

Glossary of Aviation Terms. Compiled by Lieut. Victor Pagé and Lieut. Paul Montariol. New York: The Norman W. Henley Publishing Company. 1917. Price \$1.00.

This latest production of Mr. Pagé's, now Lieutenant Pagé, is of service to those who are interested in aviation.

"THE MEDICAL CLINICS OF NORTH AMERICA"

Like the initial number of this new publication, the September issue contains a wealth of good things, too many to enumerate in this place; however, mention may be made, among others, of a clinic of Dr. Hobart Amory Hare, Jefferson Hospital, on cardiac disease and digitalis; one of Dr. David Riesman, Philadelphia General Hospital, on progressive myocarditis and treatment of cardiac decompensation; one of Dr. A. A. Stevens, Philadelphia General Hospital, on angina pectoris and allied conditions; one of Dr. John H. Musser, Jr., University Hospital, on a case of auricular fibrillation of long duration. These, as well as all the other clinical talks, are splendid and are presented in a manner that is sure to be highly acceptable to the physician who may hesitate to pick up a ponderous treatise when rushed for time or exhaust-

ed from the day's work. We can only repeat that *The Medical Clinics of North America* represent one of the best investments that a physician can make. (Published bimonthly by The W. B. Saunders Company of Philadelphia. Subscription price per year: paper cover, \$10.00; cloth, \$14.00.)

EMERY: "BACTERIOLOGY AND HEMATOLOGY"

Clinical Bacteriology and Hematology for Practitioners. By W. d'Este Emery, M. D., B. Sc. Fifth edition. Philadelphia: P. Blakiston's Son & Co. 1917. Price \$2.75.

The text of this book is arranged in three parts. Part 1 deals with bacteriology and its application in the diagnosis of certain diseases, which are taken up separately. The methods of securing and studying material for bacteriological examination are described. Part 2 is devoted to hematology, discussing the estimation and study of the blood-cells, both red and white, and drawing diagnostic inferences from the results of blood counts as a whole. In Part 3, cyto-diagnosis is taken up and the methods of collecting and studying cells contained in pathological exudates are described. This book has maintained its usefulness through four editions and, we are sure, will continue to do so in the present revision.

DUTTON: "VENESECTION"

Venesection: A Brief Summary of the Practical Value of Venesection in Disease. For Students and Practitioners of Medicine. By Walton Forest Dutton, M. D. Illustrated with several text engravings and three full-page plates, one in color. Philadelphia: The F. A. Davis Company, 1916. Price \$2.50, net.

This practical treatise on bloodletting is introduced by an interesting account of the history of this therapeutic procedure, contributed by Dr. Fielding H. Garrison. Aside from the very acceptable manner in which the practical application of the method is treated and the various maladies in which it may be of service, are discussed, the technic is described so simply and clearly that the operation should not offer any difficulties even to those who are not

in the habit of doing surgical work. Incidentally, it may be mentioned that "Gihon" (pages 198 and 213) should read Ghon; while "Erlieh" (page 199) should, of course, be spelled Ehrlich.

"PEDIATRICS"—AN ANNOUNCEMENT

Pediatrics, the journal devoted to the diseases of children, and for several years edited by Dr. William Edward Fitch, has taken its leave from the field of medical journalism as an independent publication, Doctor Fitch having been appointed a major in the United States Army. In this connection, Frederick H. Robinson, the editor of *The Medical Review of Reviews*, informs us that he has acquired Doctor Fitch's blue pencil and subscription-list, and that *Pediatrics* no longer will appear as a separate publication, but, that, in its place, beginning with January, *The Medical Review of Reviews* will contain a special department devoted to pediatrics. However, this latter feature is but one of the improvements scheduled for *The Review* for the coming year. Important symposia are now in progress, the editor will contribute a second series of "Pathfinders in Medicine," and a staff of associate editors is being formed, so that *The Medical Review of Reviews*, in entering upon its twenty-fourth annual volume, promises to be more serviceable to the profession than ever before.

"MEDICAL WAR MANUALS"

Sanitation for Medical Officers. By Edward B. Vedder, M. D. Illustrated. Philadelphia: Lea & Febiger. 1917. Price \$1.50.

This is the first of a series of medical war manuals, authorized by the Secretary of War, to be issued under the supervision of the Surgeon-General of the Army and the Council of National Defense. In style, this manual is very compact, so as to fit the pocket of the uniform, and is interleaved for additional notes. The text, which is concise, but accurate, has been compiled from many sources; it is divided into five sections, comprising the following subjects:

1. The camp: taking up the recruit, physical defects and measures to correct;

malingering; site of camp; diet; milk; water supply; table of foods, with their values, in portions, in calories, proteids, fats, and carbohydrates; sanitation; recreation, physical training, etcetera.

2. The march: weight to be carried by men; care of the feet; water supply and methods of sterilization, etcetera.

3. The trench and battlefield: sanitation of trench and hygiene of the battlefield, etcetera.

4. Insects concerned in the transmission of disease.

5. Transmissible diseases: etiology of the diseases and methods of controlling them, according to latest conceptions.

The manual contains no superfluous words or repetitions, it is up to date, and will prove of great value to the army medical officer, who has neither the necessary books at hand, for more extensive reading, nor the time.

POPE: "PHYSICS AND CHEMISTRY FOR NURSES"

Physics and Chemistry for Nurses. By Amy Elizabeth Pope. Illustrated. New York: G. P. Putnam's Sons. 1916. Price \$1.75.

The title of this useful little book might well have been extended so as to read "and for physicians", for, medical men may properly avail themselves of the information presented, especially in the later chapters, on the chemistry of cleaning, of foods, cooking, digestion, absorption, and metabolism. All these, and other, chapters are designed, of course, mainly for study by nurses and are, therefore, written in a somewhat popular style, which nevertheless is most acceptable. As a matter of fact, the amount of information condensed in this rather small volume is large and varied. This booklet has our cordial recommendation.

SPEAR: "NERVOUS DISEASES"

A Manual of Nervous Diseases. By Irving J. Spear, M. D. With 173 illustrations. Philadelphia: The W. B. Saunders Company. 1916. Price \$2.75 net.

The author has endeavored to embody in a book of moderate size the facts necessary for a proper understanding of the anatomy, the physiology, and the diseases of

the nervous system. He attempts to correct the false impression, of the student as well as of the general practitioner, that the study of diseases of the nervous system is particularly difficult, maintaining that the existing difficulties may be removed through a proper understanding of the anatomy and physiology of the nervous system and of the correct methods of examining nervous patients.

In the description of diagnostic methods, the Reviewer is pleased to find, many details have been supplied that ordinarily are taken for granted; for instance, the methods of eliciting the various reflex signs are described with considerable care. Also, the descriptions of nervous diseases are clear and usable. Altogether, the general practitioner will find here a book on nervous diseases that he can make use of without the exasperating dissatisfaction so often expressed in consulting more severely technical works on this subject.

In the matter of treatment, we are pleased to find that the author believes in the value of suitable drugs administered in proper cases and conditions. However, it seems strange that the bromide-treatment still should find such a strong support in the management of epilepsy. While it is the most convenient, it can hardly be called the best treatment. Besides, we believe that Spangler's crotalin-treatment, Reed's claim of the bacterial nature of the disease, and the recent findings as to the frequently underlying luetic factor, among others, should have received at least passing mention since they often must influence the therapeutic measures. Still, on the whole, the therapeutic suggestions throughout this book are very serviceable.

BALLARD: "MENTAL DISORDERS"

An Epitome of Mental Disorders: A Practical Guide to Etiology, Diagnosis, and Treatment. For Practitioners, Asylums, and R. A. M. C. Medical Officers. By E. Fryer Ballard, M. B., B. S. Philadelphia: P. Blakiston's Son & Co. 1917. Price \$2.25.

"This little book is not intended for students of medicine, but, for practitioners and assistant medical officers in asylums. The writer has not aspired to write a textbook of psychiatry, but, a concise practical aid to the diagnosis and treatment of the

more common varieties of mental disorders as met with in general practice and lunatic asylums." . . . "Although we are at present, in most cases, only justified in the use of the term syndrome as applied to mental disorders, that attitude, the writer ventures to think, is the negation of all clinical progress and, moreover, tends directly to discourage the study of insanity by practitioners who have only facilities for clinical investigation." (From the preface.)

SLUSS: "EMERGENCY SURGERY"

Emergency Surgery. By John W. Sluss, A. M., M. D. Fourth Edition. Revised and Enlarged. Illustrated with 685 engravings, some of them printed in colors. Philadelphia: P. Blakiston's Son & Co. 1917. Price \$4.00.

This well-known work dealing with emergency-surgery has, in its present edition, been carefully revised and brought up to the last moment. In the treatment of wound infections, especially, the experiences in the field hospitals have necessitated a completely new treatment of the subject, and the result forms a most serviceable guide for the physician who may be preparing himself for entering the medical service of the army. That the author has utilized the latest experiences, is indicated by the fact that he describes the antiseptics elaborated by Doctors Dakin and Carrel.

NICOLL: "DREAM-PSYCHOLOGY"

Dream Psychology. By Maurice Nicoll. B. A., M. B. London: Henry Frowde. (Oxford Medical Publications). 1917. Price \$2.00.

The author, Doctor Nicoll, expresses the hope that this book of his will enable the reader to regard dreams, in some degree, from the standpoint of the Zürich psychiatrist Doctor Jung, rather than from that of Freud. Yet, he realizes that dream interpretation necessarily is a personal matter and that his own point of view may differ from that of Zürich school. At any rate, it is refreshing to find here a departure from the aggressive insistence upon the sexual, which at present is so dominating a feature in the writings of psychanalists.

Condensed Queries Answered

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

Queries

QUERY 6342.—“Hypertrophy of Testicle.”

E. C. C., Missouri, has under his care a man, sixty-seven years of age, who has a hypertrophied testicle; the gland is five times its normal size, but, no history of venereal trouble, injury or anything else can be elicited. There has been no pain during the year the enlargement has existed. Weekly injections of tincture of iodine into the scrotum for two or three months seem to have stopped the progress, the testicle, though, does not decrease in size. Our correspondent asks: “Is there a serum that could be injected into the testicle to absorb it or gradually dry it up?”

We know of no drug or serum that could, with safety, be injected directly into the testicle. In a man of this age, malignancy must be seriously considered, and, despite the negative history, the possibility of lues or tuberculosis must not be lost sight of. We are inclined to believe that orchidectomy should be done, still, cannot even express a positive opinion as to that until we have a clearer idea of the condition of the testicle. Is it nodular or smooth? Any evidence of adhesions? Has a Wassermann test been made? Frankly, we should hesitate a long time before injecting iodine into the scrotum.

QUERY 6343.—“Corneal Ulcers of Luetic Origin?” E. G. B., Texas, describes a case, of hereditary syphilis (Wassermann test showed positive), objective symptoms none, with the exception that the woman in question had suffered from numerous sclerocorneal ulcers for several years. In searching for the cause of these lesions, the Wassermann test was made. The patient is thirty-eight years old, the mother of two children, has had no miscarriages or any

other trouble whatever, except almost constantly these sclerocorneal ulcers. Our correspondent wants to try “mixed treatment,” rather than the use of salvarsan. He continues:

“So far as is possible to get a family-history of this patient, it is negative, all ancestors having lived to a ripe old age. Also, her children are perfect in every way, smart and active physically and mentally. In fact, if it were not for the faith I have in the Wassermann test, I hardly could be made to believe that lues exists here.”

The existence of corneal ulcers alone would, of course, not warrant the administration of salvarsan or even of the ordinary “mixed treatment”; but, when the Wassermann test is positive, the use of salvarsan would seem to be essential. Certainly, no half-measures are likely to avail under the circumstances.

Unfortunately, you do not give us a very clear clinical picture, other than stating that “she has suffered from numerous sclerocorneal ulcers for several years.” This gives but little idea of local conditions. Other constitutional conditions, you say, are absent.

Is it not possible that this is an acquired (not congenital) syphilis?

Where syphilitic keratitis is present, there generally first is a more or less marked iridocyclitis; inflammation, starting in the ciliary body, spreads forward, thus giving rise to iritis and keratitis, or, proceeding backward, starts choroiditis. Naturally, the affection of the cornea is such a marked feature that it attracts particular attention. Occasionally interstitial keratitis does not develop until the patient is between twenty and thirty years

of age; as a rule, however, it attacks children between five and fifteen years of age.

In all cases, there is early some blurring of the sight, and careful examination will then reveal dots of keratitis punctata; that is, collections of small round cells adherent in little pyramidal-shaped masses to the back of Descemet's membrane. Even if no keratitis punctata is apparent, the cornea becomes infiltrated with inflammatory cells and exudations, and there may be some tendency to the formation of posterior synechiae. Should adhesions form, they usually will break down under the application of atropine.

This is the first stage, or the stage of infiltration, and it may last for four or six weeks, when the stage of vascularization is entered upon. At this period, vessels begin to develop in the interstitial substance of the cornea and push themselves in every direction. They are so numerous that a part of the cornea may assume a pink-flesh color. Such areas are called salmon-patches. After six or eight months, the third stage, that of resolution, sets in; the vessels gradually diminishing in size, infiltration subsiding, the cornea clearing, the iris becoming visible, and the sight improving.

A different picture, entirely, is presented when ulcers, whether of the corneal or corneoscleral type, are caused by staphylococci, streptococci, bacterium coli, bacillus pyocyaneus or other, still rarer, microorganisms.

The syphilitic ulcer or, rather, involvement of the cornea of luetic origin must be sharply differentiated from the infected ulcer, Mooren's, and the dendriform type.

Under the circumstances, doctor, we would strongly suggest the administration of salvarsan and the local use of a mild solution of argyrol or similar silver salt. Arsenic iodide might be given after meals in gradually increased dosage. However, we should hesitate to place the patient upon a mixed treatment.

QUERY 6344.—"Bromidrosis." R. E. Montana, has, for about eight years, been troubled with his feet. "The heels are white, with a bright red border around the white area, looking as though they had been frostbitten; but, I am sure they never have been. There is a constant secretion of slightly yellow fluid, which, before the day is over, gives off a very bad odor, almost

like that from the secretion of a fistula. I am of a nervous disposition and find that when I am especially nervous, my feet are more tired and wear me out much quicker than when nothing is worrying me. Of course, I change socks every day and sometimes find it necessary to run cold water on my feet twice a day. Sometimes I have distinct sharp pains, while at other times my feet just feel dead or as if they had been bound up too tight. The last year, this feeling and all the symptoms have gone forward to my toes.

"My general health otherwise is good. I am of about the right weight for my height and appear in perfect condition. I have had seventeen doctors to look at my heels and just one gave the condition a name. He called it "bromidrosis" and prescribed a dusting-powder. This powder stopped the secretion immediately and formed a thin glassy shell over my heels. When the secretion stopped so suddenly, I stopped using the powder, thinking that in the long run it would injure my general health. I am on my feet all day and when the day is over I simply must rest for awhile. I am fairly regular in my habits; in fact, more so than the ordinary young men. The weather has no noticeable influence on my feet, so, I am inclined to believe it is some nerve trouble, and should like your opinion."

There seems to be not the slightest question but that you suffer from bromidrosis, and it must be borne in mind that constitutional treatment in such cases frequently is demanded. Therefore, before it is possible to prescribe definitely, it is essential to have a clearer idea of underlying conditions. For one thing, the urine should be examined; also, it might be well to have a blood count made.

Chlorotic, anemic, and nervous individuals are particularly subject to bromidrosis, and the condition is more prevalent in those who are obliged to stand a good part of the day and live chiefly indoors.

Thorough elimination—renal, dermal, and intestinal—absolute local cleanliness (frequent ablutions and change of footwear) are essential. It is desirable that the patient possess several pairs of shoes and change daily, so that each pair will be thoroughly aired, preferably exposed to the sun, every two or three days.

Perhaps the boric-acid treatment proves most effective in the majority of cases.

The socks should be changed and washed in a solution of boric acid and dried out; cork soles, which also are soaked in the solution and dried, are to be worn in the shoes. Powdered boric acid may be dusted between the toes and over the sole of the foot before the socks (into which the powder also may be dusted) are put on.

Furthermore, the effects, we think, would be enhanced materially by washing the feet at night in a $\frac{1}{4}$ -of 1-percent solution of chlorazene.

In the German army a 5-percent solution of chromic acid is in use, this being painted on once in from three to six weeks. This agent must, however, be used with care. A 1- to 3-grain to the ounce solution of potassium permanganate, used as a wash, often acts satisfactorily. Another excellent preparation consists of 1 part of tannoform and 2 parts of talc, the feet first being thoroughly washed and then the powder freely applied.

In very many cases the following internal treatment: Sulphur, gr. 1-32; strychnine arsenate, gr. 1-128; podophyllin, gr. 1-64; collinsonoid, gr. 1-120; berberine hydrochloride, gr. 1-128; taken before each meal, over a somewhat prolonged period, together with minute doses of atropine, night and morning, will prove practically curative.

QUERY 6345.—"Reduction of Fat in Breast Milk." M. A. B., Wisconsin, asks what we should advise for the modification of mothers' milk too rich in fat?

Naturally, it is out of the question definitely to "modify" the milk, though in certain cases careful dieting on the part of the mother and the digestion of somewhat large quantities of fluid between meals will lessen the fat-content. It must be borne in mind, however, that the fat normally present in mother's milk is in excess of that of cow's milk and occasionally such high fat-content produces in the infant intestinal indigestion, colic, flatulence, frequent green, undigested stools, et cetera. In some cases, this difficulty may be overcome by giving the child breast-milk and modified milk at alternate feedings. Still, it is difficult to outline any fixed scheme for feeding, without having an exact understanding of the conditions; for, as a matter of fact, one child will assimilate richer milk at three months than another one will tolerate at six.

As Holt says: "The futility of all med-

ical treatment in such cases will be at once apparent. He who expects to relieve the symptoms of indigestion by the use of digestive ferments or by giving something before the nursing to dilute the milk will be disappointed."

In such cases, we have a choice of four courses: (1) To keep the child at the breast, endeavoring to correct the milk through treatment of the mother. (2) Partly to nurse and partly to feed from the bottle; (3) to stop all nursing temporarily, pumping out the breasts meanwhile, to keep up the secretion; (4) to wean the babe at once, and entirely. In deciding which of these courses to adopt, the condition of the child, the severity and duration of its symptoms, the findings of the milk examination, and the condition of the mother, must be considered.

We must be guided, not by what the milk contains, but by how seriously it disagrees. As a matter of fact, when the symptoms are found to be owing to an over-rich milk, prospects for continued nursing are much better than when the milk is poor. Unless the child's digestion is very feeble, one can, by treating the mother, usually make it possible to keep it at the breast.

Alcoholic beverages should, of course, be prohibited, the amount of solid food reduced materially, and the woman instructed to take long walks in the open air.

The intervals between nursing should be lengthened to at least three hours. In not a few cases, marked benefit follows administration to the child of an ounce or so of water before putting it to the breast. Should the symptoms of indigestion be of an aggravated type or persist, it will be necessary to stop nursing entirely for a time. Properly prepared cow's milk will then best meet the requirements.

As pointed out in Candler's "Every-Day Diseases of Children," barley-water is the best diluent. A child of three months may receive a mixture of one-third milk and two-thirds barley water; one of six months, half milk and half barley-water; later, three-fourths milk to one-fourth barley-water; at twelve months, pure milk may be given. If you wish to increase the proportion of sugar slightly, milk-sugar should be added. Cane-sugar should be given but rarely.

You will find the subject of infant feeding thoroughly covered in Chapin's "The-

ory and Practice of Infant Feeding" and in Griffith's "The Care of the Baby." Koplik and Holt also discuss the subject fully.

QUERY 6346.—"Paratyphoid Fever." H. S. McK., Indiana, asks us to venture a diagnosis in the case of a boy of nineteen years, 350 pounds in weight, family history good. He had typhoid fever twelve years ago; he was sick last fall, from September 5 to October 15, with symptoms similar to his present sickness, the fever lasting five weeks. The present sickness began March 19, with marked lassitude, loss of appetite, general muscular pain, the latter especially in the back and extremities. "He came to the office one week later, with a temperature of 101° F., pulse 80, respirations 20. The Widal test was negative on the 12th day. The blood pressure (systolic) was 100. He was constipated; tongue-tip and edges were red, with a white fur in center. I ordered him to bed on March 27. There was a variation in the evening and morning temperature of 1 to 3 degrees during the first week in bed, in the second week, it stood between 103 and 104 degrees most of the time. For the past two or three days, his temperature has been normal in the morning and 100 degrees in the evening.

"During the beginning of the sickness, there was increased salivation for two or three days; also, some epistaxis during the sickness. There is increased perspiration during the morning hours the last few days; a certain amount of abdominal distention at all times. The pulse never has been above 90, is not dicrotic and most of the time runs 84 to 88. I could find no rose-spots. There is no headache, but, some vomiting. The urine at times is scanty, owing, possibly, to the high temperature. Most of the time it is clear—straw-color, no albumin. The sample mailed was secured on the one day that it was highly colored and filled with urates. The patient has been given the combined sulphocarbolates (10 grains every three or four hours) during his entire sickness, and a liquid diet. In addition, he received sodium salicylate, 10 grains every four hours, and arbutin, 1 grain every two hours, for two or three days until the urine cleared."

Despite the very definite symptom-complex, it would seem necessary, in the absence of rose-spots and with urine and Widal tests negative, to consider this a case of paratyphoid fever.

As you are aware, careful examination of the blood in such cases will show the presence of the paratyphoid bacillus, which presents characteristic differences in culture-media from Eberth's bacillus. A very careful examination of the blood should be made and two or three specimens of urine submitted.

In addition to the sulphocarbolates, especially those of sodium and calcium, we would give hexamethylenamine in rather large doses, in conjunction with arbutin. As soon as the acidity drops and intestinal conditions are more satisfactory (say, in a week or ten days), substitute bulgarian-bacillus bonillon (one-half the contents of an ampule) morning and night. Further treatment must, of course, be symptomatic.

QUERY 6347.—"The Passing of Turbectomy." J. B. K., Iowa, seeks information regarding turbinectomy, and also practical and concise literature on the subject.

The more recent works on diseases of nose and throat devote very little space to the consideration of turbinectomy. Thomson states that complete turbinectomy has been entirely superseded by a judicious employment of the partial turbinotomies, and adds: "Submucous resection of deformities of the septum has also supplied us with a satisfactory method of correcting nasal obstructions, while preserving physiologically important mucosa, so that there is no longer any need to sacrifice all the valuable secreting surface of an inferior turbinal." In the chapter on hypertrophic rhinitis in "Diseases of the Nose and Throat," by the same author, the best method of removing portions of the turbinals is fully described and illustrated.

You may find further information on the subject by consulting Ballenger's "Ear, Nose, and Throat." Consulting one of the best operators in this field, in Chicago, with regard to this subject, he suggested that we urge you to forget that such an operation as turbinectomy ever was done.

Dioxogen

A Peroxide of Hydrogen
which is pure, stable, effective as a
germicide and harmless.

Dioxogen fulfills all the positive and negative postulated properties which are essential in a really reliable bactericidal agent.

Dioxogen is pure, in that it contains but the slightest trace of irritating acids, a decided drawback to the therapeutic value of the ordinary solutions of peroxide of hydrogen.

Dioxogen is stable to a degree that it will retain its strength, under trying conditions, for an almost unlimited length of time.

Dioxogen possesses germicidal properties which have been proven clinically and experimentally for many years, and which have been substantiated during the war in Europe.

Dioxogen has a negative property which distinguishes it and renders it superior to other antiseptics. While exerting a potent germicidal action on infected wounds, it in nowise injures healthy tissue.

Dioxogen in addition to its bactericidal action, is a detergent of no mean value and clears away clots and agglutinations from wounds or sores with surprising rapidity and facility.

Dioxogen is an efficacious hemostatic and deodorant, but is itself odorless and practically tasteless.

THE OAKLAND CHEMICAL CO.
10 ASTOR PLACE **NEW YORK.**

News Notes Department

The condition recognized as anemia is one that represents many different clinical pictures and cannot be satisfactorily treated by any single remedy. Iron does well in one case and fails in another. Arsenic likewise. Combined, these two often succeed where either one alone fails. Patients come for treatment in whom, even after careful examination by modern diagnostic methods, it is impossible to lay the finger upon exactly what is at fault. Empirically such cases respond to what is recognized as reconstructive and tonic treatment. After recovery from the acute stage of many diseases, the patient does not promptly return to a normal state of health, strength or vigor. In such cases, something in the way of a general builder and tonic is indicated, and usually succeeds.

It is for these reasons that the combination of hematinic, antihemolytic, reconstructive, nutrient and tonic agents, marketed under the name of Hemaboloids-Arseniated (with Strychnia), has come into such general use and become justly popular. It not only supplies iron in the most easily assimilable form, isomeric practically with hemoglobin itself, and derived from natural, i. e., food sources, but at the same time provides for the stimulation of the production of more red blood corpuscles, the protective effect of arsenic against disintegration of the corpuscular elements of the blood, the tissue building and metabolic

stimulating effect of predigested nutrient (protein), together with the tonic effect of strychnia. Write to the Arlington Chemical Co., Yonkers, N. Y.

In his "Treatise on Clinical Medicine," Professor William Hanna Thomson points out what was shown long since and frequently confirmed, that cod-liver oil increases the proportion of red blood corpuscles in the blood much more than does iron or any other medicinal agent. Not only for this reason, but also on account of other excellent qualities of cod-liver oil, the (almost), ill reputed into which it has fallen of late years, at least with many physicians and certainly with the majority of patients, is to be deplored. However, properly administered, cod-liver oil is one of the most valuable remedies in the treatment of debilitating diseases, of malnutrition and many other affections. Professor Thomson goes so far as to say that the prognosis in many cases of consumption is conditioned by the patient's ability to take cod-liver oil. He recommends that cod-liver oil should always be given shortly after eating, and, if at first a patient's stomach is deranged by it, it should be begun in teaspoonful doses, gradually increased to a tablespoonful. Its retention by the stomach is promoted by simultaneously taking an acid preparation of the pepsin, a common prescription of his being 4 drams

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ORGANIDIN -- WAMPOLE

Dr. ———, a prominent Western physician, reports a case of blood-pressure of 280 which Organidin, in 10 min. doses, reduced to 210 in one week. Patient is still taking the preparation and is steadily improving. No disagreeable symptoms from its use have been noted.

Trade-size package mailed to any address postpaid on receipt of \$1.00.
(1-oz. package, an ordinary three-weeks' treatment.)

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Welch's

Grape Juice

ABOVE all, the physician wants to know exactly what is contained in any food or drink prescribed for diet. There is no uncertainty regarding Welch's Grape Juice. It is exactly as Nature made it—the pure juice pressed from ripe, premium, Concord grapes, sterilized and bottled in clean new bottles.

A booklet of interest to all who are concerned with diet in sick room or hospital, "The Food Value of the Grape," will be sent on request.



The Welch Grape Juice Company, Westfield, N.Y.

of lactic acid to 6 oz. of Fairchild's essence of pepsin, the dose being 2 teaspoonfuls with each dose of cod-liver oil. A good preparation of cod-liver oil is called Hydroleine, which is often better borne than cod-liver oil, a dose being a dessertspoonful. Hydroleine is manufactured by The Chas. N. Crittenton Company, 115 Fulton St., New York. Samples will be sent free prepaid upon application.

Very often we are consulted by patients who are hardly ill in the ordinary meaning of the word, but who desire assistance for esthetic reasons, either because they are too—let us say, plump, or too thin, because they find it difficult to adopt a good upright carriage, or for other matters that cause them keen distress and that, yet, the physician is apt to put off with a smile as being hardly up to him to handle. Where physicians have failed in supplying the demand, others have stepped in and have, thus, contributed their share in producing the impression as though physicians were not as necessary to human happiness as they claim. Fortunately, some of "these others" who try to remedy wrongs that may be physiologically simple and yet producing large effects as regards distress and unhappiness, have worked hard to study diligently to fit themselves for the work that they wish to do, and their efforts have been crowned for a success commensurate with the ability that they developed. Among all these associate, or, if you prefer, dissociate outside healers, there is one who appears to use to "belong," as it were, for the reason that she made it a point never to antagonize physicians' efforts but to cooperate with them in her health work to

which she has devoted her best efforts for years. We speak, of course, of Miss Susanna Cocroft, 624 Michigan Blvd., Chicago, who has aided a multitude of ailing and invalid women, of fat and scrawny, of round-shouldered and lopsided people to brace up and to correct the physiological wrongs which were responsible for their distressing conditions. We appreciate Miss Cocroft's work, for we know that it is good and honest, and physicians can safely call upon her to aid them in the management of clients whose care can properly be transferred to her.

The artificial methods of feeding infants unfortunately have the disadvantage either of giving rise to digestive disturbances or of being unable to prevent them in the same degree in which this is the case with breast feeding. Gastrointestinal wrongs in artificially fed infants are most frequently manifested by symptoms of diarrhea, and it is this that entails a serious strain upon the organism, preventing, as it does, sufficient assimilation of food and, therefore, appropriate nutrition. In such cases it has been found that after the preliminary clean-out with calomel, a suitable preparation of tannin was well calculated to restore the irritated mucous membrane to its physiological functioning power. In Tannalbin, an albumin compound of tannic acid is offered that is eminently useful for the purpose. It is odorless and tasteless, and contains about 50 percent of tannin. It exerts a noted astringent action in enterocolitis of infants and children, and there are numerous reports in medical literature that bear witness to the splendid services that have been secured by its employment. E.

*Oil may be pure—in fact,
Yet fail in therapeutic deed!
It may be "safe"—and yet inefficient!*

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McK&R

LIQUID ALBOLENE

is not only Safe to use, but having proper Spread and perfect Mixing properties, it supplies efficient Lubrication, and encourages perverted bowel function to return to normal.

McK&R LIQUID ALBOLENE for Constipation induced or aggravated by impaired peristalsis, deficient intestinal secretion, abnormally hard or dry feces.

SAMPLES

LITERATURE

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Caffein—The Coffee Drug

The growing movement against intemperance has come to include the beverages in which lurk veritable habit-forming drugs, such as caffein or thein (practically identical), found in coffee and tea.

This is of interest to the Physician because of his wide range of intercourse among the people whose life and health he is to conserve. It is of interest, also, because the habitual use of caffein in a beverage so weakens the organs (by inevitable reaction) on which it acts specifically—heart, kidneys, brain and nerves—as to be cause for pathological consideration.

In other words, the "caffeinized" nervous system is not in a normal condition, nor is such an individual in condition to react therapeutically, or with certainty, where indicated drugs are administered.

POSTUM

used regularly, in place of coffee or tea, is the "way out" for the doctor and the patient.

Soon after leaving off coffee and using Postum, the clearing of the system of caffein is usually apparent and the patient is not only relieved in great measure of the harmful effects of caffein, but his system can react to the remedies indicated.

Postum contains no coffee nor any drug-containing substance. It is made of clean, hard wheat and a small percent of molasses, and when properly prepared for the table (see directions on package) is delightfully palatable.

Samples of Instant Postum, Grape-Nuts and Post Toasties, for personal and clinical examination, will be sent on request to any Physician who has not already received them.

Postum Cereal Company, Battle Creek, Mich., U. S. A.

Bilhuber, 45 John St., New York, who is the American agent for the Knoll Specialties, will be glad to give you further information on the subject.

The strongly oxidizing properties of hydrogen peroxide are utilized freely for a large variety of conditions. For many years it has been made to serve for the cleansing of wounds in which its peculiar properties are called upon to search out and remove pus and all cellular detritus. Peroxide of hydrogen has also been found of value internally in various conditions, one point of interest being that it limits the amount of hydrochloric acid secreted by the stomach, and, hence, it has been recommended for administration in cases of hyperacidity. In prescribing peroxide of hydrogen, it naturally is of importance to secure a product that is characterized by great purity and by its freedom from noxious admixtures. Such a product is Dioxogen, prepared by The Oakland Chemical Co., of New York, concerning which an exceedingly interesting monograph has been published by the manufacturers, in which the characteristics of and indications for this preparation are discussed fully. We suggest, Doctor, that you request The Oakland Chemical Co. to send you a copy of this instructive pamphlet.

We always had an idea that the elaboration of specious and finicky calculations was peculiar to German investigators with a mathematical bent. However, we were somewhat surprised to find a perfectly good calculation mentioned according to which a busy person takes a minimum

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Made from pure cod-liver oil emulsified after a scientific formula by approved processes.

The need of many children for cod-liver oil has been met with marked success by Hydroleine. They take it willingly; they—as well as adults—like its distinctive nutty flavor. Hydroleine is also exceptionally digestible. While its scope of usefulness is widened by its palatability and digestibility, it is always notably dependable.

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Dr. Rogers' *Tycoos* Self-Verifying

Sphygmomanometer
\$25.00

complete with carrying case and sterilizable sleeve

Extra quality means extra service and the \$25.00 expended for a *Tycoos* makes you rightly feel the soundness of your judgment.

Your dealer is prepared to demonstrate to you that in the *Tycoos* he is offering you the Sphygmomanometer dominating the field.

\$25.00

Modern Treatment of Syphilis

ONLY in recent years have physicians found that THE PROPER COMBINATION of mercury and iodine has greater scope in all stages of syphilis than either drug alone. Their remedial action in combination is much more promptly exerted. The discomforting effects of mercurialization and iodism are easily escaped.

How administer the proper combination in a form that was convenient, palatable and free from by-effects? The answer to that question was found, after years of experiment, in

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Binioidide of mercury, readily soluble in potassium iodide, forms a solution which is quickly absorbed into the circulation. These ingredients, in powder form, surrounded by a capsule, make the Chichester preparation promptly effective, tasteless and non-irritant. It is more economical than the combination in solution and more convenient to carry around.

Put up in bottles only, the price of which is \$1.00. A sample quantity sent to any physician on request.

TERRALINE, a refined medical petroleum, is marketed in three forms: TERRALINE plain; with heroin; and with creosote.

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of 13,000 steps daily, 390,000 monthly and approximately 5,000,000 yearly. 5,000,000 steps a year, each of which covers about two feet, that makes about 10,000,000 feet or—what's the use, you can work it out yourself. However, setting down one's foot 5,000,000 times a year means jarring the calcaneus and the spinal column 5,000,000 times, and the sum total of this continued jarring is an item in the not inconsiderable wear and tear in our present cement-paved pereginations that must needs be reckoned with. Consequently, it is with perfect justice that the O'Sullivan Rubber Company 131 Hudson St., New York, points the moral: "Have rubber heels attached to your shoes." Undoubtedly, O'Sullivan heels will modify the jarring and thereby ease the strain with all its possible unfavorable results.

Every now and then a cute little red devil visits us who claims to be a close relation to Pluto. We don't know just how he can prove his family allegiance, nor do we know why the particular spring water that he advertises should be called "Pluto Water," unless it be that it works like ——— everything. At any rate, in the home of that little devil and of Pluto Water, at French Lick Springs, Indiana, there is a most delightful establishment that is open all the year around, being devoted to the treatment of dyspepsia and indigestion, with all its variations and complications, including diseases of the liver, of the kidneys, of the nerves, of the skin, and of the temper, meaning the blues. Seriously, Pluto Water is a splendid "opener" and stimulant to the functions of the digestive tract. It is bottled

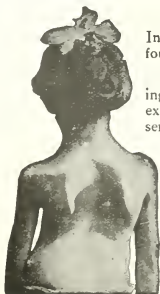
and furnished anywhere in the United States, although it seems to us that the best results could be obtained by a visit to the beautiful caravansary at French Lick Springs. When we feel particularly blue and mean, we always think we would like to take a trip to that same place. Some day we shall do it.

A new and promising preparation, which has recently been put on the market by The Abbott Laboratories, of Chicago, is Chlorazene Surgical Cream, which contains 0.7 percent of Chlorazene (para-toluene-sodium-sulphochloramide), in a sodium stearate base. This is not an ointment in the true sense of the word, but a "vanishing" cream, which is soluble in water and can be easily removed from any tissue with a moistened pledget of absorbent cotton.

This cream is being extensively used by Dr. Alexis Carrel in his service in France, as a "spread" for wounds which have previously been rendered aseptic by the use of the hypochlorite or the para-toluene-sodium-sulphochloramide solution. They are kept "clean" by covering with this cream. Chlorazene Cream is also being used for the treatment of burns and as a local application to abraded surfaces, eruptions, wounds, bruises, and all other conditions where antiseptic ointments are ordinarily employed. It undoubtedly has a very promising field of usefulness, and we believe will meet with a large sale.

In casting about for a reliable anodyne for routine purposes, the physician can make no better choice than Papine (Battle). The reasons are that it is a purified opium product of defin-

After Infantile Paralysis -



In the treatment of spinal curvature, so often an end result in Infantile Paralysis, a large number of general practitioners have found a great aid in the Philo Burt Appliance.

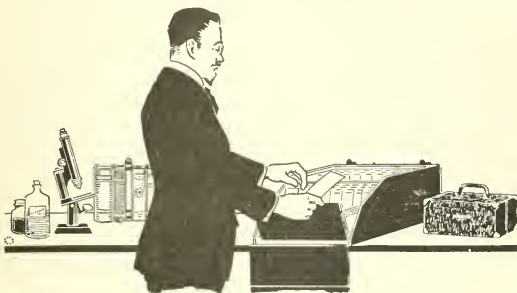
Its flexibility and lightness of weight—its easy removal for bathing, treatment and rest—its comfort and adjustability—the continual extension and perfect support it gives; all these many advantages serve to make the **Philo Burt Appliance** recognized as the ideal supporter for use in the successful treatment of the various forms of spinal curvature from whatever cause. It is especially adapted and unusually effective in the benefit and cure of children's cases where curvature is found as a result of Infantile Paralysis.

We have such confidence in the Philo Burt Appliance that we permit a *trial of thirty days* where it is ordered on the recommendation of the attending physician. Each Philo Burt Appliance is made to the measurements and to meet the special requirements in each individual case. *For Men, Women and Children.*

Our Free Book illustrates and describes the Philo Burt Appliance and gives much information of interest to the Physician and Patient. Let us send you a copy and explain to you the plan of co-operation with Examining Physicians.

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itely uniform strength, carefully prepared and productive of a minimum of after-effects.

Papine (Battle) is of particular advantage in the case of women or neurotics, who must be protected from the psychical impression offered by a hypodermic injection of morphine.

Whenever an anodyne is needed Papine (Battle), will be found to serve well.

Neurasthenia is conceived to be a disturbance in balance of the whole nervous system, in such a way that new production of nerve strength remains behind the consumption of it. Restrictions of diet, so often necessary, call for use of a substance that will have a balance-regulating effect. Sanatogen is such a substance. One physician states that in course of eight years he has treated more than 500 cases with Sanatogen. Results were so satisfactory that he never has had occasion to try any other nutrient preparation. Sanatogen has proved of eminent service in many other conditions of faulty nutrition besides those induced by neurasthenia. It has the advantage of being absorbed without residue by the organism and participates in metabolism if taken in the quantity required. If the quantity exceeds the need, an important increase of vital substance and albumin takes place. Sanatogen also effects a better utilization of other nourishment. What is of particular interest to nerve specialists is, that its phosphorus is completely absorbed, since lecithin—contained chiefly in nerve substance, requires phosphorus for its formation. Sanatogen is supplied by The Bauer, Chemical Company, 30 Irving Place, New York, and has called forth a large amount of

interesting literature which can be secured by writing to the home office.

As a winter resort for tuberculous patients Alamogordo, New Mexico, seems to be particularly well suited. Being farther south than Santa Fe and Albuquerque the winters are pleasanter and its altitude of 4,300 feet is also more favorable. If you have patients that you wish to send there write for the booklet of the Mountainair Sanatorium, Alamogordo, New Mexico.

There are four ways in which you can save on tire bills; first, by keeping the tires at all times well inflated; second, by using your brakes with caution; third, by not overloading the car; fourth, by repairing small cuts in the tread as they appear and being sure wheels are in alignment.

However, there is still a further way in which substantial savings may be made on your tire bills, and that is, to obtain high-grade tires at manufacturers' prices. Freshly made, perfect tires (no seconds) are offered in all sizes, non-skid or plain, by the Service Auto Equipment Corporation, 966 Westover Building, Kansas City, Mo. Better write and find out about it.

This is the time when there is a plentiful harvest of "colds" which may or may not develop into serious affliction, according to the degree of resistance that the organism opposes to the bacterial invasion; but, also according to the treatment prescribed by the physician. Among other things, such as the preliminary clean-out, iodized calcium represents a splendid stimulant to the bronchial and pharyngeal mucous mem-

The Newer Therapy

recognizes the practical advantages of throwing indicated medicaments directly into the venous blood stream, to be—

More rapid action.

More certain effect.

No modification of drug action by digestive processes.

More convenient for both physician and patient.

HEMO-THERAPIN [Witte's Solution]

supplies physiologically adapted iron, phosphorus, calcium, potassium, and sodium, with properly detoxicated phenols and cresols.

Rheumatism, malaria, blood toxemia, leg ulcers, sepsis—surgical or puerperal, eczema, hemorrhoids, etc.

Special literature and clinical data to physicians only, on request.

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Preparedness on hurry calls counts. KORA-KONIA in your bag may prove the most dependable thing you have.

KORA-KONIA is soothing, cooling, comforting and healing. A scientific, dusting powder that is valuable in maternity cases. Fine as an umbilical dressing or for raw and sore nipples. A scientific powder to use after making sutures, minor operations and surgical work.

KORA-KONIA as an aid is indicated in the treatment of acne, chafing, cuts, slow-healing wounds, rash, poison-ivy, intertrigo, dermatitis and local skin affections. Mildly astringent—antacid—haemostatic and absorbent to a degree.

Your patient's interests and your own are both best served through its use.

Supplied by your Druggist—25c

Test-it-yourself-package FREE by writing to

THE HOUSE OF MENNEN NEWARK, N. J.

brane. It is in addition an excellent form in which to secure the system effects of iodine, and has made many friends for itself by its uniformly satisfactory action. In incipient cold, calcidin troches that are made by The Abbott Laboratories, Chicago, containing $\frac{1}{2}$ grain of Calcidin and flavored with extract of licorice and oil of anise, are about as pleasing and unobjectionable a preparation of iodine as can be found. We suggest that you write and ask The Abbott Laboratories about them.

Time was when the paraphernalia of the physician consisted largely in herbs and simples which he collected himself, while such instruments as he required for operative work were comparatively crude and simple, and were supplied by artisans that were not specially trained. With the modern development of surgery and medicine, and since the appliances and instruments utilized by surgeon and by physician in their daily work have become not only numerous, but highly refined in construction, medical men have to look for their supplies to purveyors who have highly specialized their work. Take as an instance the development of Laennec's discovery of the stethoscope. This potent aid for the diagnosis of many disease conditions, not only in the lungs, but elsewhere, has resulted in a great many contrivances that possess more or less merit; and, the same is true for a multitude of apparatus employed in surgery, electrotherapy, mechanotherapy, etc. All these paraphernalia that physicians need require the greatest care and ingenuity of construction and mechanic exactness amounting often to genius

in their perfection. Speaking of stethoscopes, we are reminded of the highly efficient Akouophone put on the market by Huston Bros. Co., 30 E. Randolph St., Chicago, an instrument that we personally have found remarkably efficient in the detection of irregularities in function that are perceptible to the ear. The Huston Bros. Co. are purveyors to the medical profession in everything that may be needed by the physician, as well as by the surgeon, and they are ready to aid the general practitioner particularly in completing and perfecting his outfit.

The mixtures of paraffin with resins and antiseptic oils for the treatment of burns and various other injuries to the skin, have rapidly acquired a well merited popularity, and it is not astonishing that "Ambrine," the French prototype of these preparations has given rise to many imitations and, undoubtedly, often to some improvements. It is now established beyond contradiction that suitable mixtures of this kind can be applied with gratifying results, and we are reminded that the Holliday Laboratories of Pittsburgh, Pa., offer in Cerelene a hot wax dressing that is an elegant preparation, and has been found very efficient for the purpose for which it is prepared. H. J. Baker & Bro., 81 Fulton St., New York City, are selling agents for this preparation.

In the "specific" treatment of those bacterial infections that determine what is clinically designated as a "cold," it is not always possible to make a definite bacterial diagnosis, and for this reason polyvalent, or, rather, combined bacterins

GUAIODINE

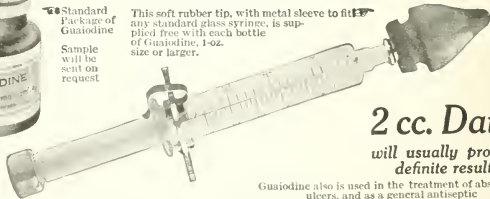
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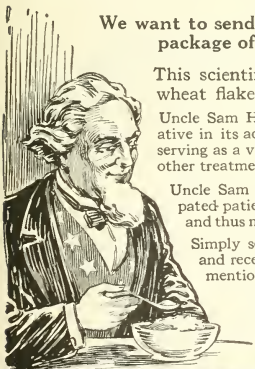
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so have been made by Micajah & Company for the treatment of hemorrhoids, and, moreover, it has been found that the same remedy applied to ulcerated surfaces elsewhere than in the vagina, for instance, on the leg, has produced very desirable results. Samples and literature supplied to physicians on request.

The Official Bulletin of the United States Government, published daily under order of the President by the Committee on Public Information, states, in the issue of October 31, 1917: "Many matters of importance touching upon American co-operative effort and activity along medical and surgical lines were developed during the past week in Chicago, when the general medical board and the States activities committee of the medical section of the Council of National Defense held stated meetings in conjunction with the annual meeting of the Clinical Congress of Surgeons of North America.

"Addresses were made by Dr. Edward Martin, Dr. E. K. Dunham and Dr. W. E. Lee, all of Philadelphia.

"By means of a moving-picture demonstration and the detailing of experimental and clinical data, they showed how much could be done for clean wound healing by the new antiseptic, Dichloramine-T, which is being investigated under instructions from the Surgeon General's Office."

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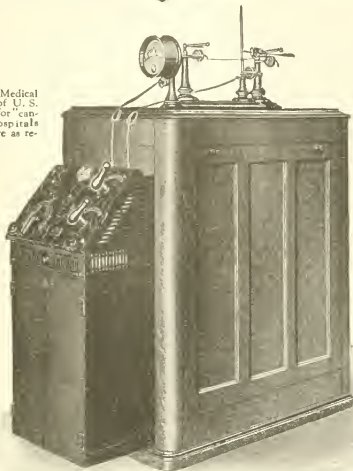
Article in "Med. Review of Reviews," Dec. 1911

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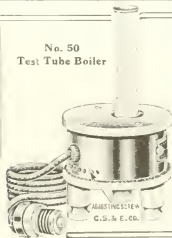
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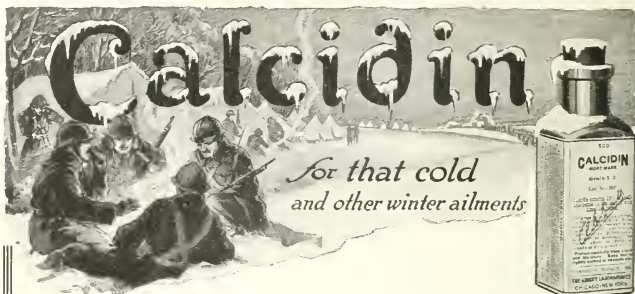
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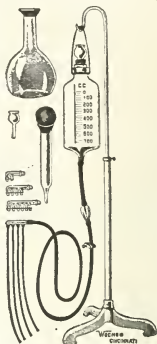
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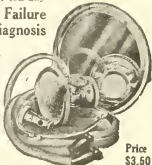
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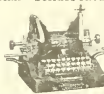
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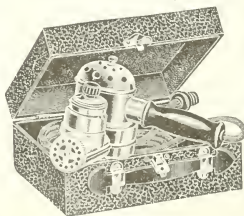
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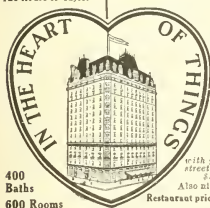
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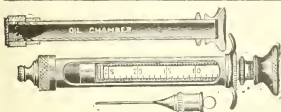
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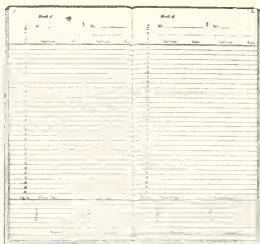
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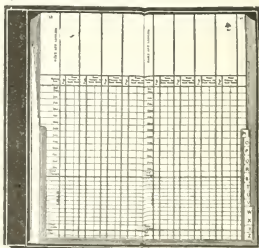
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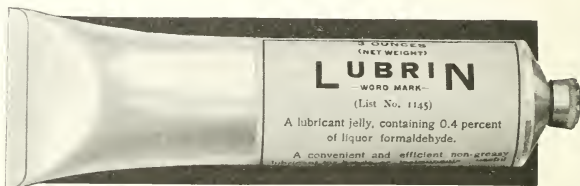
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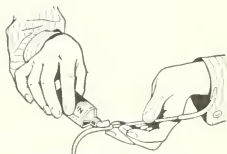
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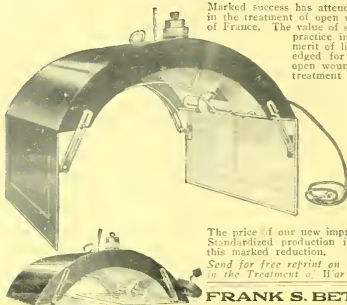
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